University of Alberta

AN EVALUATION STUDY OF THE B. Ed. BUSINESS EDUCATION PROGRAMS IN THE UNIVERSITY OF TECHNOLOGY, JAMAICA

BY

CHINYELU NJIDEKA ONYEFULU ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment
of the requirements for the degree of DOCTOR OF PHILOSOPHY

Department of Educational Psychology

Edmonton, Alberta

Spring 2001

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Degree: DOCTOR OF PHILOSOPHY

Year this Degree Granted: 2001

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January 31, 2001

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The undersigned certify that they have read, and recommended to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled AN EVALUATION STUDY OF THE B. Ed. BUSINESS EDUCATION PROGRAMS IN THE UNIVERSITY OF TECHNOLOGY, JAMAICA submitted by CHINYELU NJIDEKA ONYEFULU in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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ABSTRACT

The B. Ed. Business Studies and Secretarial Studies programs at the University of Technology, Jamaica (UTECH) began in 1982. Located in the Faculty of Education and Liberal Studies, the programs are organized in terms of three consecutive modules. Each module consists of a seven-week instructional summer component and a fall/winter seminar component (Module One), seminar/work experience (Module Two), and research project (Module Three). To date, however, there has been an absent of a formal independent evaluation to verify the effectiveness of these programs. To address this lack, the present study was conducted. The general evaluation question was: "How effective are the B. Ed. Business Studies and Secretarial Studies programs in the preparation of graduates for the practical demands of their teaching occupation?" To provide an answer to this general evaluation question, 27 specific evaluation questions were addressed. These questions were organized in terms of the Context, Input, Process, and Product (CIPP) components of the evaluation model proposed by Stufflebeam (1971).

The final sample (n = 358) included students, graduates, instructors, senior administrative and academic staff of UTECH, principals of the schools in which the graduates work, and the officials of two funding agencies (the Ministry of Education and Culture and the Canadian International Development Agency). A multi-method, multi-source data collection procedure was employed to collect the data, with the same or similar data collected from different, but appropriate sources. These included questionnaires, interviews, appraisal scale, observation scale, and documents review.

The findings revealed that there are both strengths and weaknesses of the present B. Ed. Business Studies and Secretarial Studies programs. However, in the present case, the weaknesses far out numbered the strengths. While the objectives and, especially, the expected student outcomes were seen as acceptable, the overall quality and support for the B. Ed. Business Studies and Secretarial Studies programs and their components were on balance, somewhat poor and inadequate. Further, the graduation rate is not high and those who do graduate do not posses all of what is reflected in the objectives and expected students' outcomes and what is expected by the principals of the schools in which the graduates teach. Several recommendations were made based on the findings.

ACKNOWLEDGMENTS

I would like to express my gratitude to many people who helped me to achieve this goal of getting a doctorate degree in Measurement and Evaluation. First, I would like to thank Dr. W. T. Rogers, my mentor and my supervisor who inspired me to read Measurement and Evaluation, and made it possible for me to join the Centre for Applied Measurement and Evaluation (CRAME), in the Faculty of Education, University of Alberta. Without his selfless efforts this dream would not have come through. I would also extend my gratitude to his wife, Rachel Rogers, for her help and advice on many non-academic issues during my stay at the University of Alberta. Thank you to the Rogers.

Secondly, I am thankful to Dr. Mark Gierl who taught me courses in Program Evaluation and Univariate Statistics, and who was a member of my Supervisory Committee. I am grateful to Dr. Xia Ma for introducing me to HLM and to his wife for her kindness toward me. I am also grateful to Dr. Joe da Costa for allowing me into his Research Methods course and who was a member of my Supervisory Committee.

Thirdly, I would also like to express my appreciation to my CRAME colleagues; you were my family in U of A. And a special thanks to Dr. Joanna Tomkowicz for her help in walking me through the statistical steps of my data analyses. You are the greatest consultant CRAME ever had. And thanks for developing my confidence in the use of SPSS for my data analyses. I would also like to thank Christine Vandenberghe for her company during my late night work in CRAME, and for caring a lot about my welfare.

Lastly, my sincere gratitude to Dr W. E. Wariboko for his friendship and endless support during my volunteer program in Jamaica, and my academic journey in U of A. Your quest for academics inspired and encouraged to purse a doctorate program. Thank you honey.

DEDICATION

This thesis is dedicated to my family. To Mum and Dad: you supported my decision to purse this program. Thank you for all the emotional support and for investing your money in laying a strong educational foundation for me. Without your love and support I would not have come this far in my academic journey. To my brothers Obi, Odi, and David, and my sister Ifeoma, for giving me unconditional love and support throughout my academic journey. I love you all.

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CHAPTER ONE

INTRODUCTION

In response to the recommendations made by the UK Mission on Higher Technical Education in the late 1940s, the Government of Jamaica established the Jamaica Institute of Technology in 1958 (The Third Development Plan, 1992). A year later, it was rechristened as the College of Arts, Science and Technology [CAST] (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999). However, despite the UK Mission on Higher Technical Education recommendation to prepare technical teachers for high school, it was not until 1971 that the Department of Technical Teacher Education [DTTE] was created. At that time, the Department enrolled a total of six students into a three-year technical teachers Diploma course in Mechanical Technology. Two additional Diploma programs in Business Education and Home Economics were implemented a year later (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999).

In response to a growing need to improve the teaching and instruction of the Diploma graduates, B. Ed. degree programs were phased in over a six-year period. The B. Ed. for Business Education was introduced in 1982, Home Economics in 1985, and Industrial Technology in 1987 (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999).

Most recently, the Jamaican government has realized that if the economy is to remain competitive in the global marketplace, it must urgently introduce available cutting-edge technology and managerial practices through the existing tertiary institutions in the country. According to Stitt-Gohdes (1996) "today's workforce is influenced by a number of factors including low productivity, uni-skilled workers, and changing demographics" (p. 1). It is only with a multiskilled, responsible workforce that the economy in Jamaica can remain competitive in the global marketplace in the 21st century.

To meet this challenge, the Government upgraded CAST to become the University of Technology, Jamaica (UTECH) in September 1995. Structural reforms were introduced. For example, some departments were merged and converted into university faculties and other departments became faculties in their own right. Today, UTECH has five faculties: Built Environment, Engineering and Computing Studies, Health and Applied Science, Business and Management, and Education and Liberal Studies.

UTECH, as the only technological university in the Caribbean, meets the needs of the nation and the wider Caribbean community by providing various levels of technical and technological education programs. According to "Curriculum 2000: A New Curriculum for A New Millennium" (1997),

> UTECH is the Caribbean's only technological University and is at the apex of the Jamaican technical and vocational educational training system, serving the human resource and social-economic development needs of both the Island and, to an increasing extent, the region. (p. 8)

At this time the need for a technological institution and the response to the Government's initiative to develop its economic and social needs through the existing tertiary institutions is reflected in the growing number of students seeking admission to UTECH. For example, the number of students admitted in 1979 was 2,142. By 1989 the number had risen to 3,025 (The Third Development Plan, 1992). For 1997, the number of students was 5,979: 2,567 full-time students and 3,412 part-time students (The University Council of Jamaica, 1997).

The government of Jamaica provides funds for 50 percent of the operating costs of UTECH. Additional funding and technical assistance is provided by several multinational agencies and foreign governments. Example agencies include the Canadian International Development Agency (CIDA), Canadian Training Awards Program (CTAP), Commonwealth Fund for Technical Cooperation (CFTC), Caribbean Development Bank (CDB), Caribbean Community Organization (CARICOM), European Economic Commission (EEC), Fulbright Awards Program, Inter American Development Bank (IADB), Kellogg Foundation, Latin American Scholarship Programs for American Universities (LASPAU), Organization of American States (OAS), Organization of Eastern Caribbean States (OECS), Pan American Health Organization (PAHO), Peace Corps (USA), Project Hope, United Nations Development Program (UNDP), United Nations Education, Scientific, and Cultural Organization (UNESCO), United Nations International Children's Emergency Fund (UNICEF), United States Department of Agriculture, United States of America Agency for International Development (USAID), and the World Bank. Governments that have provided financial support and technical assistance include the governments of Britain, Germany, India, Japan, Netherlands, Nigeria, Norway, and the United States (The Third Development Plan, 1992).

Despite the growth noted above and the support from a variety of organizations and governments, there has been an absence of formal independent evaluations of the programs offered at UTECH. Yet, statements regarding the effectiveness or non-effectiveness of UTECH have been made. For example, Dr. George Philip, in his keynote address at the 1994 staff seminar, commended the then CAST in its efforts to train skilled workers. He further stated that perceptions in the marketplace are that CAST graduates are highly skilled and practically oriented. In contrast, the World Bank, in 1993, reported that "throughout the Caribbean many teachers, officials and employers decry the level of performance and achievement of many graduates from all levels of the educational training systems" (p. 43).

However, these reports were not informed by evidence gleaned from systematic program evaluations. Thus, there is a need to verify these assertions through completion of systematic and sound program evaluation. Further, to ensure that the graduates of UTECH are properly prepared to meet the demands of a global economy, there is need for continuous systematic evaluation, with an eye toward program revision that best meets the needs of the students.

Purpose of the Study

Consequently, the present study was designed to begin to address the lack of systematic evaluations at UTECH. The purpose was to evaluate the two B. Ed. programs offered within the Business Education Division in the Faculty of Education and Liberal Studies in UTECH. The general question addressed was: "How effective are the B. Ed. Business Studies and Secretarial Studies programs in the preparation of graduates for the practical demands of their teaching occupation?"

The Evaluation Framework

The framework for the evaluation of the B. Ed. Business Education programs was based on the comprehensive and systematic model designed by (Stufflebeam, 1971; Stufflebeam & Shinkfield, 1985). The Stufflebeam model includes four evaluation components: Context, Input, Process, and Product (CIPP). Context evaluation provides guidance for the choice of objectives and assignment of priorities. Input evaluation relates to the choice of program resources and strategies that will be used to achieve the program objectives. Process evaluation provides guidance for monitoring program implementation. Product evaluation provides guidance for the termination, continuation, or modification of the program (Worthen, Sanders, & Fitzpatrick, 1997; Finch & Crunkiton, 1993).

Using this framework, 27 more specific evaluation questions were identified for the present study. In identifying these questions, the administrative and academic staff, the funding agents, the instructors, the graduates, and the students were consulted.

Context Evaluation Questions:

1. What is the mission statement of the B. Ed. Business Studies and Secretarial Studies programs in UTECH, and how well known is it to the stakeholders?
2. What is the philosophy of the B. Ed. Business Studies and Secretarial Studies programs?
3. What are the objectives of the B. Ed. Business Studies and Secretarial Studies programs?
4. What are the expected student outcomes of the B. Ed. Business Studies and Secretarial Studies programs?
5. Do the program objectives, the expected learning outcomes, and the philosophy serve as effective guides for the present and future implementation of the B. Ed. Business Studies and Secretarial Studies programs?
6. Who are the students to be served by the B. Ed. Business studies and Secretarial Studies programs?

Input Evaluation Questions:

7. How effective is the governance and administrative structure of the B. Ed. Business Studies and Secretarial Studies programs?

8. What are the intended and actual curricula for the B. Ed. Business Studies and Secretarial Studies programs and to what degree are they congruent?

9. What is the number and qualifications of the instructional staff in the B. Ed. Business Education programs?

10. What resources are made available to sustain the B. Ed. Business Studies and Secretarial Studies programs and are they adequate?

11. What are the entry requirements for the B. Ed. Business Studies and Secretarial Studies programs and what are students and graduates academic expectations?

Process Evaluation Questions:

12. What is the quality of the B. Ed. Business Studies and Secretarial Studies programs as implemented?

13. What is the quality and adequacy of course components of the B. Ed. Business Studies and Secretarial Studies programs as implemented?

14. What is the extent of overlap among courses within the Business Studies Program, within the Secretarial Studies program, and between the Diploma Business Education and B. Ed. Business Education programs?

15. How important and relevant are the courses in each of the three modules and fall/winter seminars following Modules One and Two?

16. What is the quality of instruction in the B. Ed. Business Studies and Secretarial Studies programs?

17. What is the quality of the procedures followed to evaluate students in the B. Ed. Business Studies and Secretarial Studies programs?

18. What are the quality and adequacy of resources provided to students and instructors in the B. Ed. Business Studies and Secretarial Studies programs?

19. What factors enhanced the implementation of the B. Ed. Business Studies and Secretarial Studies programs?

20. What factors affected the implementation of the B. Ed. Business Studies and Secretarial Studies programs?

21. What factors posed future threats to the success of the B. Ed. Business Studies and Secretarial Studies programs?

Product Evaluation Questions:

22. What is the level of students' academic performance in the B. Ed. Business Studies and Secretarial Studies programs?

23. What are the attitudes of the students and the graduates toward the B. Ed. Business Studies and Secretarial Studies programs?

24. What is the level of performance of the Business Studies and Secretarial Studies graduates in their present role as teachers?

25. What is the success rate of the students admitted into the B. Ed. Business Studies and Secretarial Studies programs?

26. What are the strengths and weaknesses of the B. Ed. Business Studies and Secretarial Studies programs?

27. How good is the three-year Modular system in meeting the objectives of the B. Ed. Business Studies and Secretarial Studies programs?

Definition of Terms

For the purpose of clarity in this study, the following terms were defined and adopted:

1. *Program*: an ongoing collection of related educational activities that result from the implementation of a course of study in order to attain a set of goals, objectives, or expected student outcomes.
2. *Program evaluation*: the systematic assessment of the worth or merit of on-going program activities.
3. *Program participants:* the students who are enrolled in the program being evaluated.
4. *Program objectives:* the planned purposes of the program being evaluated.
5. *Program structure:* the organization and administrative environment in which the program took place.
6. *Effectiveness:* the direct and actual effects of the program being evaluated on the students.
7. *Intended program:* the educational activities and the course of study proposed to be offered in the program being evaluated.
8. *Actual program:* the educational activities and the course of study implemented in the program being evaluated.
9. *Intended curriculum:* the proposed syllabus to be used for guiding teaching and learning in the program being evaluated.
10. *Actual curriculum:* the present syllabus used in the implemented program being evaluated.

11. *Evaluation design:* the model or approach used in evaluating the program in order to produce an unbiased appraisal of the program's merits.

12. *Outcomes*: the results or consequences of the program on learners or program participants.

13. *Expected student outcomes:* the statements of the knowledge and skills students are to learn or acquire.

15. *Stakeholders:* the individuals or groups who have an interest in the program and or a participant in the program being evaluated.

Delimitation of the Study

As indicated, the evaluation was delimited to two programs within one division within one faculty. It was felt that it would be better to delimit the evaluation in this way, and to use the evaluation model and results as a model for further evaluation at UTECH and other tertiary institutions within Jamaica.

The study was further delimited to students registered in the B. Ed. Business Studies and Secretarial Studies programs during 1998 and 1999. The graduates from the programs were limited to those who graduated between 1990 to 1999 and who were presently teaching in a secondary high school, comprehensive high school, technical high school, or a community college.

Organization of the Dissertation

The remainder of this dissertation is organized in nine chapters. In Chapter Two, the literature review is presented. The topics covered include the development of CAST to UTECH, the establishment of the B. Ed. Business Studies and Secretarial Studies programs, the program and faculty structures, the history of program evaluation, a brief review of the approaches to program evaluation, and a more complete description of the CIPP model. The procedures used for this study, including a description of the population and sample, methods of data collection, and data analysis are provided in Chapter Three. In Chapter Four, the response rates and demographic description of the samples used for the study are presented. The results of this study and recommendations, if any, derived from these results are organized in four chapters corresponding to the four components of the CIPP evaluation model. These recommendations are provided with the intention of providing direction to the UTECH administrators and faculty on future actions. Hence, Chapter Five contains a discussion of the context evaluation results. In Chapter six, the results of the input evaluation are presented. The results of the process evaluation are provided in Chapter Seven, followed by product evaluation results in Chapter Eight. Chapter Nine contains a summary of the study, conclusions, recommendations based on the findings, and suggestions for future research and follow-up studies.

CHAPTER TWO

LITERATURE REVIEW

Presented in this chapter is a description of the two programs that were evaluated and a review of related literature. It is organized into two major sections. In the first section, the background context for the evaluation is provided. The items discussed include UTECH's mission statement and goals, the B. Ed. Business Studies and Secretarial Studies programs at UTECH, and the rationale for the B. Ed. Business Studies and Secretarial Studies programs at UTECH. In the second section, program evaluation is reviewed. The topics addressed include formative and summative evaluation, history of program evaluation, approaches to program evaluation, management-oriented evaluation approaches, and a definition of program evaluation used in the present study. The section concludes with a more in-depth discussion of the CIPP Model.

Context for the Evaluation

The idea of a technological college in Jamaica was first suggested by a Mr. R. S. Anderson in a graduation address in the late 1940s (The Third Development Plan, 1992). Later in that decade, the original concept of the college was outlined by the British Government Advisory Panel on Technical Education (The Third Development Plan, 1992). The idea was that the college should be comprehensive in nature, providing training for students in skilled areas. Subsequently, in 1958, the government opened the Jamaica Institute of Technology. Located on a site covering 35 acres of land, the Institute began operating in a building vacated by the Jamaica Farm School. Later in that year, the name of the Institute was changed to College of Arts, Science and Technology (CAST).

In 1995 CAST was granted the status of a university, and the name changed to the University of Technology, Jamaica (UTECH).

Initially CAST offered courses in the three disciplines: institutional management, building, and electrical and mechanical engineering. The initial enrollment was 56 students. There were seven full-time academic staff supported by five administrative staff and 16 ancillary staff (B. Ed. Self-study, 1986).

UTECH presently is organized in five faculties: The Built Environment, Engineering and Computing Studies, Health and Applied Science, Business and Management, and Education and Liberal Studies. Student enrollment is 3,418 full-time students and 2,407 part-time students. The staff now includes 298 academic staff and 302 administrative and support staff. This growth is in keeping with the general growth noted in other third world countries. Gould (1993) summarized this growth:

> in the last 30 years the rapid growth of enrollments at all levels of education in almost all third world countries is indicative of the popular thirst for schooling, and it is part of global, universal movement associated with wider aspects of the developmental processes in the third world. (p. 1)

UTECH's Mission Statement and Goals

The conversion of CAST to UTECH in 1995 resulted in a review of the mission statement for UTECH. This was to ensure that the values and characteristics of UTECH reflected those expected of a university. The mission statement that resulted from this review is

> to foster excellence in scholarship and promote professionalism through the provision of an internationally recognized learning environment, which stimulates creativity and innovation, engages in the effective transfer of knowledge and creates new technologies through research and development, for the enhancement

> of our graduates and the benefit of society. ("Curriculum 2000" A New Curriculum For A New Millennium, 1997, p. 9)

This mission statement reflects the basic philosophy and goals of education in Jamaica. The philosophy of Jamaican education is based on the principle of egalitarianism, social justice, self-reliance, national pride and a deep respect for the rights and freedom of individuals and of others, as well as for the public interest (Miller & Murray, 1977).

The University's mission statement is accompanied by the following eight goals:

1. To create a supportive, student centered environment which fosters the acquisition of intellectual competencies as well as social, cultural, aesthetic and spiritual awareness.
2. To educate and train middle and upper level technical and professional workers.
3. To grant postgraduate and undergraduate degrees, diplomas and certificates.
4. To provide a flexible delivery system for non-traditional adult students.
5. To engage industry and the professions in a partnership to provide high performance work placements.
6. To provide support for students through an organized financial aid program.
7. To provide opportunities for articulation and transfer with other higher education and training institutions.
8. To foster and encourage applied product-oriented research as an integral part of staff responsibility. ("Curriculum 2000"A New Curriculum For A New Millennium, 1997, p. 9)

In order to achieve these goals, programs in UTECH are implemented based on seven principles: (a) distinctive competence, (b) relevance, (c) quality, (d) flexibility and access, (e) leadership in applied science and technology, (f) financial viability, and (g) diversity ("Curriculum 2000"A New Curriculum For A New Millennium, 1997, p. 10).

With these goals and guiding principles, the programs offered at UTECH are designed to accommodate the growing demands of working adults and high school graduates in Jamaica. These programs train students to face competition in the global free market economy ("Curriculum 2000"A New Curriculum For A New Millennium, 1997). Further, inspired by these developments in Jamaica, technical education officials from other Caribbean Islands, including Antigua, Barbados, the Bahamas, Bermuda, Belize, Dominica, Grenada, Guyana, Montseeat, St. Vincent, St. Kitts-Nevis, and from Turks-Caicos, send students to UTECH to meet their growing demands for technical teachers.

The B. Ed. Business Studies and Secretarial Studies Programs at UTECH

The development of the initial plans to establish a B. Ed. Business Education programs began in 1979. In January of that year, Louise Fleming, a Canadian Teacher's Federation consultant, and Elsie Webber, a senior education officer for Business Education in the Ministry of Education, prepared a proposal outlining details of the structure, content, and staffing of the proposed degree program (B. Ed. Self-study, 1986). They recommended that "the B. Ed. degree in Business Education be granted by CAST and validated by the University of the West Indies" (B. Ed. Self-study, 1986, p. 1). Fleming and Webber asserted the urgency for the program and urged that the program be started in the summer of that same year. However, three years passed before the then Technical Teacher Education Department began work on the proposal. This resulted in a visit by two American consultants from Iowa State University (Professors William Wolansky and Ruth Huges) and one from the State University of New York at Albany (Professor Harvey Kahalas). The purpose of their visit was to assess the proposal put together by Fleming and Webber in the Jamaican context. Based upon their recommendations, the proposed B. Ed. Business Education programs was revised, and the programs began in 1982 (B. Ed. Self-study, 1986). By this time there were already

292 graduates from the Business Education diploma programs: 210 in Secretarial Studies and 82 in Business Studies.

To start the program, the B. Ed. Business Education administrators decided that the initial target population should consist of the sub-population of the 292 graduates from the Diploma Business Education programs who were teaching in high schools. Letters were sent to the various high schools in Jamaica inviting graduates teaching in schools to apply for the B. Ed. Business Education degree programs. A total of 41 graduates applied. Of the 41, 32 persons were selected. In addition, two students from other institutions were selected. Of the 34 students who began the B. Ed. Business Education programs in 1982, 17 graduated, six discontinued the program, and one migrated to the United States before completing the degree (B. Ed. Self-study, 1986).

Rationale for the B. Ed. Business Studies and Secretarial Studies Programs at UTECH

In the mid 1980s, there were "about five" Business teachers with a B. Ed. degree in Business Education in Jamaica (B. Ed. Handbook, 1986, p. 6). Given this small number of degree graduates, many posts that required a degree qualification were filled by diploma graduates (B. Ed. Self-study, 1986). Business subjects taught in the high schools of Jamaica were staffed by diploma graduates and not degree graduates. According to the B. Ed. Handbook (1986) diploma graduates were being employed as "heads of Business Education Departments in the secondary schools; CXC examiners in Typing, Shorthand, and Principles of Business; Education officers in the Ministry of Education; and Business lecturers in community colleges, and tertiary institutions" (p.6). It is against this backdrop, and the awarding of degree granting status to what was now to be called UTECH, that the full-time B. Ed. degree program was established in 1995. The graduates of this program would be better qualified to assume teaching positions in the area of business education in the high schools and administrative positions in the high schools and elsewhere.

The B. Ed. Business Studies and Secretarial Studies programs are located in the Faculty of Education and Liberal Studies. As shown in Figure 1, within this faculty are the Department of Humanities and Liberal Studies and the School of Technical and Vocational Education. The Department of Humanities and Liberal Studies delivers courses in all the faculties at UTECH in the following three subject areas: Communication, Humanities and Social Sciences, and Education. Within the School of Technical and Vocational Education, there are three academic divisions: Business Education, Home Economics, and Industrial Technology. Each of the three academic divisions is further divided into specialist sub-areas. Business Education includes Business Studies and Secretarial Studies; Home Economics includes Clothing and Textiles, and Food; while Industrial Technology includes General and Industrial.

There are two programs within each of the specialist sub-areas: the diploma program and the post-diploma B. Ed. degree program. Students who complete the three-year full-time diploma and who wish to further their education return for a three summer part-time program leading to B. Ed. degree. Once they have completed the B. Ed., they receive a higher rate of pay.

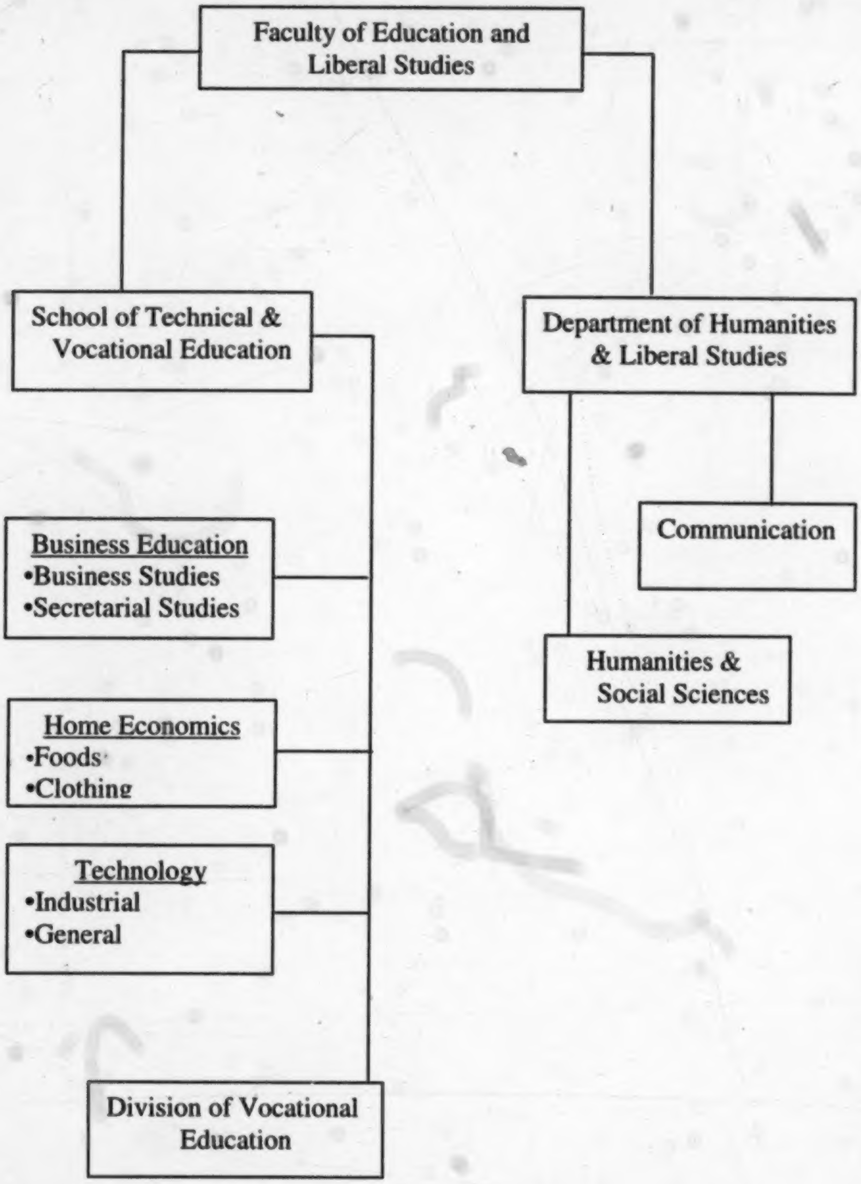
Faculty of Education and Liberal Studies
School of Technical & Vocational Education
Department of Humanities & Liberal Studies
Communication
Humanities & Social Sciences
Business Education
•Business Studies
•Secretarial Studies
Home Economics
•Foods
•Clothing
Technology
•Industrial
•General
Division of Vocational Education

Figure 1. Structure of the Faculty of Education and Liberal Studies

Program Objectives

The general objective of the Faculty of Education and Liberal Studies is to provide student teachers "with the opportunities to develop research and administrative skills in relation to his/her area of specialization while extending interpersonal, technical and teaching skills" (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999, p. 2). To meet this general objective, the following program objectives were set:

> (1) A baccalaureate program to assist teachers of Business and Secretarial Studies, Home Economics, Industrial and General Technology in upgrading their general, professional, and technical skills. (2) Training for technical teachers which will assist them in understanding features of the Caribbean environment significant to their area of specialization. (3) The teacher with skills in curriculum planning, development and evaluation. (4) Added leadership and administrative skills in organizing and supervising specialist technical programs. (5) Opportunities for broadening the teachers' general knowledge to make them more informed and competent professionals. (6) Training that will enable teachers to plan, conduct, and interpret educational and technological research. (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999, p. 3)

Entry Requirements

To be eligible for admission to the B. Ed. program a candidate must:

1. have been awarded a CAST/UTECH diploma in any of the following specializations - Business Education: Secretarial Studies, Business Studies; Home Economics: Clothing, Foods, Home and Family; Industrial Technology and General Technology;
2. have at least two years of teaching experience at the secondary level or higher; and
3. satisfy the Selection Committee through a qualifying examination and/or interview. (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999, p. 5)

Program Structure

The Faculty of Education and Liberal Studies summer degree programs is offered in a series of modules. A module, according to Hall and Jones (1976), is a "learning unit with stated objectives, a pre-test, learning activities to enable students to acquire competencies in the pre-test as shown to be lacking, and a competency evaluation to measure learning success" (p. 11).

The basic structure of the B. Ed. degree program in Business Education consists of three modules for both the Business Studies and Secretarial Studies specializations (see Figure 2). Each module consists of two components: summer and fall/winter. With one exception, the curriculum for each summer component is consists of two core courses common to both specializations and two specialist courses. The one exception is in Secretarial Studies Module Three, where there is only one specialist course. The common core courses include Communication Skills and Research Methods 1 in Module One; Educational Administration and Research Methods 2 in Module Two; and Educational Measurement and Curriculum Development in Module Three (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999). The Business Studies and Secretarial Studies students are required to take the following specialist courses in Module One: Data Processing 1, Business Law, and Small Business. In Module Two, the two groups are required to take the following specialist courses: Data Processing 2 and Small Business 2. In addition to these two specialist courses, the Business Studies students are expected to take Financial Accounting 1, while the Secretarial Studies students take Word/Information Processing 1.

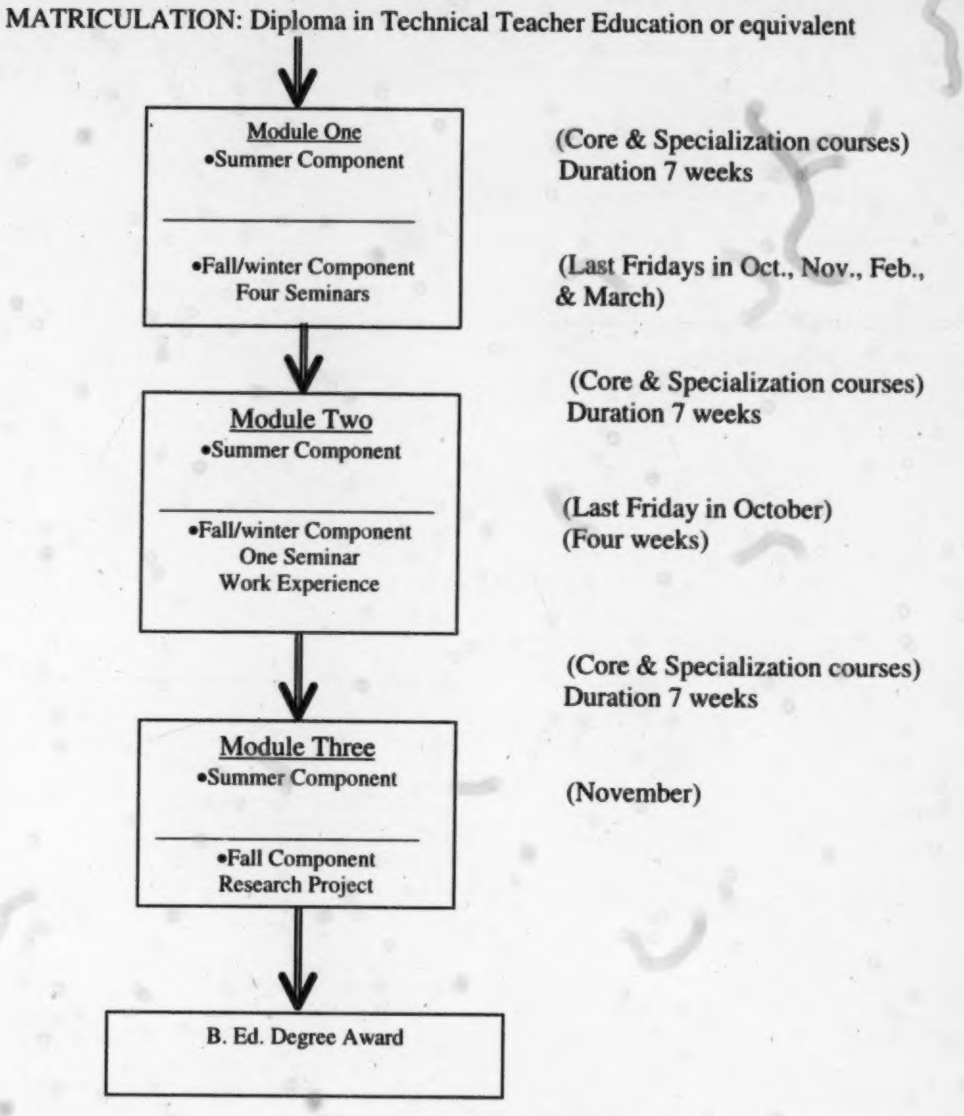
MATRICULATION: Diploma in Technical Teacher Education or equivalent
Module One
•Summer Component
•Fall/winter Component
Four Seminars
(Core & Specialization courses)
Duration 7 weeks
(Last Fridays in Oct., Nov., Feb., & March)
Module Two
•Summer Component
•Fall/winter Component
One Seminar
Work Experience
(Core & Specialization courses)
Duration 7 weeks
(Last Friday in October)
(Four weeks)
Module Three
•Summer Component
•Fall Component
Research Project
(Core & Specialization courses)
Duration 7 weeks
(November)
B. Ed. Degree Award

Figure 2. The Basic Structure of the B. Ed. Degree Programs (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999, p. 4).

In Module Three, the Business studies take Financial Accounting II and Caribbean Economic Growth and Development, while, the Secretarial students take Word/Information Processing II. Each summer consists of six weeks of lectures and one week of examinations.

As shown in Figure 2, Module One contains a four seminar series. These seminars are conducted on the last Friday in October, November, February, and March. Upon completion of the first summer courses and the four seminars, successful students are promoted to Module Two. This module is offered in the following summer. The fall/winter component for the second module includes one seminar (last Friday in October) and a five-week work experience, which must be completed by the last Friday in October. On that day a single seminar is held to discuss the work experience. Students who successfully pass the Module Two courses and satisfactorily complete the work experience are then promoted to Module Three. Module Three courses are completed during the third summer. As well, the students begin a research project that must be completed by the end of November. Given successful completion of the third module and the research project, students are awarded the B. Ed. degree in the month of March of the following year.

Program Evaluation

Many scholars, such as Sanders (1992), Anderson and Ball (1978), and Knox (1972), have written about the purposes of evaluation in different but related ways. For example, Knox (1972) stated that "the general purpose of evaluation is to improve the educational program by facilitating judgments about its effectiveness based on evidence" (p. 199). Furthermore, he summarized the specific purposes of program evaluation as:

making explicit the rationale for an educational program; collecting evidence, analyzing the data and drawing conclusions from it; making judgments based on the evidence; and implementing the decisions to improve the educational program (p. 199). Anderson and Ball (1978) discussed the purposes of program evaluation under six major headings. These are:

> (I) To contribute to decisions about program installation. (II) To contribute to decisions about program continuation, expansion, or certification. (III) To contribute to decisions about program modification. (IV) To obtain evidence to rally support for a program. (V) To obtain evidence to rally opposition to a program. (VI) To contribute to the understanding of basic psychological social, and other processes. (pp. 3 - 4)

Sanders (1992) explained the purposes of evaluation as giving direction to a school program; identifying needs; setting priorities among needs; identifying and selecting different approaches; monitoring and adjusting programs; determining outcomes; determining if or not a program should be supported, changed, or terminated; and judging requests for resources to support programs. Common to these three writers is the underlying general aim of program evaluation to assess the effectiveness of an evaluation object (program, process or product) for the purpose of improvement.

Formative versus Summative Evaluation

According to Scriven (1967) evaluation has two distinctive roles: formative and summative. Scriven defined formative evaluation as "designing and using evaluation to improve the evaluand" and summative evaluation as "designing and using evaluation to judge merit" (cited in Shadish, Cook, & Leviton, 1991, p. 73). The view that evaluation plays two different roles is shared by others such as Popham (1988) and Hopkins (1989). For example, Popham (1988) defined formative evaluation as "appraisals of quality focused on instructional programs that are still capable of being modified," and summative evaluation as "appraisals of quality focused on complete instructional programs" (pp. 13 - 14).

Other evaluators, such as Chen (1997) and Patton (1996), hold a different view about the roles of evaluation. For example, Chen (1997) did not see any clear distinction between the two roles. He argued that viewing evaluation as having two different roles would "lead to problems in classifying relevant evaluation activities" (p. 123). Patton (1996) questioned the two roles in light of changes that took place in evaluation since Scriven's initial conception of these roles. Patton pointed out that over the years evaluation had expanded to include the functions of developing programs and empowering participants. These two functions were not recognized by Scriven.

Although different scholars in the area of program evaluation hold different views about the roles of evaluation, the fact remains that the two distinctive roles proposed by Scriven (1967) allow evaluators to distinguish what form of evaluation they are conducting and, thereby, provide a focus for the evaluation.

Overview of the History of Program Evaluation

The historical overview of program evaluation presented here is limited to formal program evaluation. Informal program evaluations lack systematic procedures for collecting evidence about the value and merit of a phenomenon. In contrast, formal program evaluations include systematic procedures for collecting evidence and making judgments about the value and merit of a phenomenon.

Formal program evaluation has existed since 2000 B. C. Then civil service examinations were used to measure the proficiency of public officials in China (Worthen, Sanders, & Fitzpatrick, 1997). Since then the use of formal evaluations in different countries has increased over the years. For instance, during the 1800s, Great Britain had a reform movement in which commissions were set up to hear testimony about the efficacy of different educational institutions, while in the United States attempts were made to measure the quality of large school systems (Worthen et al., 1997).

By late 1800, evaluations in United States moved toward accreditation of universities and secondary schools, and using what is called the accreditation model (Worthen & Sanders, 1973). The beginning 1900s marked the introduction of norm-referenced testing programs. The results from these testing programs were used to evaluate educational programs. In response to the limitations of norm-referenced testing method, Smith and Tyler (1942) introduced criterion-referenced testing, and, through their Eight-Year Study (Smith & Tyler, 1942), a new dimension for educational evaluation was introduced (Worthen et al., 1997). In the early 1950s, the use of evaluation in social programs flourished in areas such as delinquency-prevention programs, felon-rehabilitation projects, psychotherapeutic and psychopharmacological treatments, housing programs, and community organization activities (Rossi & Freeman, 1982).

The late 1950s and 1960s witnessed a marked growth of formal program evaluation, with the emphasis on ways of conducting program evaluation. At a general level, Hayes (1959) wrote a monograph on evaluation research. Bloom, Engelhart, Furst, Hill, and Krathwohl (1956) and Krathwohl, Bloom, and Masia (1964) published, respectively, a set of cognitive objectives and a set of affective educational objectives which were used to determine the expected or desired outcomes or products of schools and other educational institutions. Public cry for accountability in education continued to increase. Several state departments of education and legislatures began to require reports from schools on student academic performance. At that time, the American Educational Research Association (AERA) began a monograph series in Curriculum Evaluation (Worthen & Sanders, 1973). New evaluation strategies were developed but "the methodology of evaluation remained fuzzy in the minds of most evaluators" (Worthen & Sanders, 1973, p. 7).

Public interest in educational evaluation increased when the Soviets launched Sputnik I in 1957. This interest led to an increased demand for school accountability. Questions were raised about the effectiveness of schools given what was perceived to be a large financial investment in education by local and federal governments. The system of public education in the United States, which was considered to be one of the nations finest accomplishment, came under scrutiny, particularly in the areas of science and mathematics. As a consequence, governments shifted emphasis from the Arts to the sciences and mathematics (Popham, 1974).

Cronbach (1963) marked the beginning of the use of unmatched experimental designs for gathering information for evaluation purposes (Taylor & Cowley, 1972), Suchman (1967) reviewed evaluation research methods, and Campbell (1969) came up with his social experimentation perspective on evaluation. Other writers, including Scriven (1967), Stake (1967), and Stufflebeam (1968), produced evaluation models (Worthen et al. 1997). The 1970s saw the publication of books, in contrast to articles, on program evaluation [for example, Wholey, Scanlon, Duffy, Fukumoto, and Vogt (1970); Caro (1971); Rossi and Williams (1972); Weiss (1972); Worthen and Sanders (1973), Riecken and Boruch (1974); and Bernstein and Freeman (1975)].

The 1980s marked the introduction of scholarly journals devoted to evaluation. These journals include *Evaluation and Program Planning; Evaluation Practice; Evaluation Review; Evaluation Quarterly; Educational Evaluation and Policy Analysis; Studies in Educational Evaluation; Canadian Journal of Program Evaluation; New Directions for Program Evaluation; Evaluation and the Health Professions; ITEA Journal of Test and Evaluation; Performance Improvement Quarterly; and Evaluation Studies Review Annual* (Worthen et al., 1997, p. 39 - 40).

During the late 1980s and early 1990s authors like Bickman (1987), Scheirer (1987), and Shadish, Cook, and Leviton (1991) shifted the focus of the program evaluation literature from practice and methods to theory. Since then attention on the theory of evaluation has continued to develop.

Approaches to Program Evaluation

The field of program evaluation has evolved over time and has become quite broad in the audiences a program evaluation serves and the variety of approaches, methods, or strategies used to complete a program evaluation. Recently Scriven (1991) described program evaluation as a transdiscipline that is like a utility company that serves its many different customers in a variety of ways.

House (1980, 1983a, 1983b) grouped the variety of evaluation approaches into two epistemological categories, which he called objectivism and subjectivism. With particular reference to program evaluation, objectivism requires that "evaluation information be scientifically objective" (Worthen et al., 1997, p. 65). That is, the data-collection and analysis approaches that are used yield results that are reproducible and verifiable by other competent persons using the same approaches. According to

Stufflebeam and Webster, (1994), early examples of this type of evaluation approach are the experimental and quasi-experimental research studies used by Lindquist (1951), Cronbach (1963), Campbell and Stanley (1966), Suchman (1967), Wiley and Block (1967), and Glass (1969).

In contrast, subjectivism relies upon "an appeal to experience rather than to scientific method" (Worthen et al., 1997, p. 65). Stake (1978), Eisner (1979), and Guba and Lincoln (1981, 1989) are among the program evaluators who use the subjectivist approach.

Furthermore, House (1976, 1983a) separated the principles for assigning values that are closely related to objectivism and subjectivism epistemologies, namely utilitarian versus intuitionist-pluralist evaluation (Worthen et al., 1997). House (1976) mentioned that "utilitarian evaluation accepts the value premise that the greatest good is that which will benefit the greatest number of individuals" (cited in Worthen et al., 1997, p. 66). Thus the utilitarian evaluation approach verifies the impact of the overall program on program participants by using the objectivist approach in determining the program gains or impact. The intuitionist-pluralist evaluation approach focuses on the impact of a program on each individual through the use of subjectivist approach.

An alternative evaluation classification was presented by Worthen et al., (1997). They classified the different approaches taken into six categories:

> (1) Objectives-oriented approaches, where the focus is on specifying goals and objectives and determining the extent to which they have been attained;
> (2) Management-oriented approaches, where the central concern is on identifying and meeting the informational needs of managerial decision makers;
> (3) Consumer-oriented approaches, where the central issue is developing evaluative information on "products," broadly defined, for use by consumers in choosing among competing products, services, and the like;

> (4) Expertise-oriented approaches, which depend primarily on the direct application of professional expertise to judge the quality of whatever endeavor is evaluated;
> (5) Adversary-oriented approaches, where planned opposition in points of view of different evaluators (pro and con) is the central focus of the evaluation; and
> (6) Participant-oriented approaches, where involvement of participants (stakeholders in that which is evaluated) are central in determining the values, criteria, needs, and data for the evaluation. (p. 78)

According to Worthen et al., (1997) these six categories fits the utilitarian and intuitionist-pluralist evaluation distinctions made by House (1976, 1983a). Figure 3 below illustrates the distribution of the classifications of the six evaluation approaches "along House's (1983a) dimension of utilitarian to intuitionist-pluralist evaluation" (Worthen et al., 1997, p. 78).

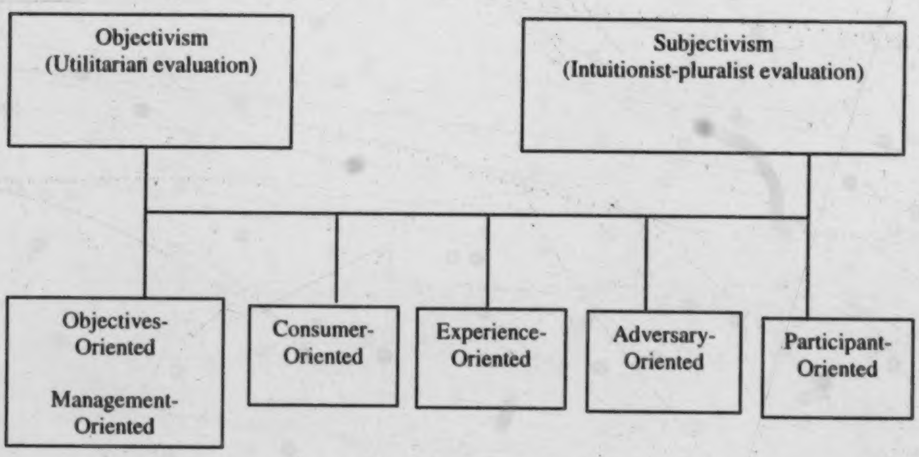
Objectivism
(Utilitarian evaluation)
Subjectivism
(Intuitionist-pluralist evaluation)
Objectives-Oriented
Management-Oriented
Consumer-Oriented
Experience-Oriented
Adversary-Oriented
Participant-Oriented

Figure 3. Distribution of Six Evaluation Approaches on the Dimensions of Objectivism (Utiliarian) to Subjectivism (Intuitionist-Pluralist) Evaluation (Worthen et al., 1997, p. 79).

As shown in Figure 3, the objective-oriented and management-oriented approaches are placed at the utilitarian evaluation end of the continuum. These two approaches share certain characteristics that allow them to be grouped under one category. The objective-oriented evaluation approach uses "goals or objectives as a central focus in the evaluation procedure" (Worthen et al., 1997, p. 84), while the management-oriented evaluation approach focuses on the use of evaluative information for decision making rather than program objectives.

Moving to the right, the consumer-oriented approach follows the objective and management-oriented approaches. This evaluation approach is based on the use of checklists to judge the worth of product evaluation.

The experience-oriented evaluation approach follows next, and falls at the middle of the continuum. Known also as the expertise-oriented evaluation approach, this approach depends mostly on professional expertise in judging a program. Experience-oriented evaluation approaches "to evaluation have emphasized the central role of expert judgment and human wisdom in the evaluative process and have focused attention on such important issues as whole standards (and what degree of publicness) should be used in rendering judgments about program" (Worthen et al., 1997, p. 131).

The adversary-oriented evaluation approach is classified next after the experience-oriented approach and it is located towards the intuitionist-pluralist evaluation end of the continuum. This evaluation approach uses legal paradigm and quasi-legal adversary hearings for evaluating programs.

The remaining approach, the participant-oriented evaluation approach, is placed at the end of the intuitionist-pluralist evaluation continuum. The central focus of this approach is on the use of "firsthand experience for evaluating program activities and setting" (Worthen et al., 1997, p. 154).

Management-Oriented Evaluation Approaches

Of the six approaches shown in Figure 3, the management–oriented approach was considered to be most appropriate in terms of purposes and objectives of the evaluation of the B. Ed. Business Education programs at UTECH. The management-oriented evaluation approaches were developed in the mid-1960s when Cronbach (1963) made suggestions for conducting process evaluation. By 1968, Stufflebeam recognized the limitations of the existing evaluation approaches, such as the objective-oriented approach suggested by Tyler (1942), and expanded on Cronbach's work. This expansion lead Stufflebeam (1968) and Alkin (1969) to propose a framework using management theory. They developed a management-oriented evaluation approach in which decision making was the central focus. Accordingly, Stufflebeam (1973) defined educational evaluation as "the process of delineating, obtaining, and providing useful information for judging decision alternatives" (p. 129). The decision-making model pioneered by Stufflebeam saw evaluation as a procedure for improving a program and also for judging the worth of a program (Stufflebeam & Webster, 1980). By 1971, Stufflebeam developed the Context, Input, Process, Product (CIPP) evaluation model to help administrators and decision-makers make good decisions about their program. Alkin (1969) proposed a similar model:

1. Systems assessment, to provide information about the state of the system. (Very similar to context evaluation in the CIPP model).
2. Program planning, to assist in the selection of particular programs likely to be effective in meeting specific educational needs. (Very similar to input evaluation in the CIPP model).

3. Program implementation, to provide information about whether a program was introduced to the appropriate group in the manner intended.
4. Program improvement, to provide information about how a program is functioning, whether interim objectives are being achieved, and whether unanticipated outcomes are appearing. (Very similar to process evaluation in the CIPP model).
5. Program certification, to provide information about the value of the program and its potential for use elsewhere. (Very similar to product evaluation in the CIPP model). (As cited in Worthen et al., 1997, p. 101)

Several other evaluators have adapted the management-oriented approach proposed by Stufflebeam (1971). For example, the Discrepancy Evaluation approach (Provus, 1971) was developed to serve the program managers in the management of program development through sound decision making at the local district level. Patton's Utilization-focused evaluation approach developed in 1986 is also an extension of the management-oriented approach.

The typical methods used in the management-oriented evaluation approaches are needs assessment, surveys, case studies, advocate-adversary teams, observations, and quasi-experimental and experimental designs. The management-oriented evaluation approaches seek to provide answers to questions such as "how should a enterprise be planned? how should a given plan be carried out? how should a program be revised?" (Stufflebeam & Webster, 1994, p. 338).

The strengths and weaknesses of the management-oriented evaluation approach as described by (Worthen et al., 1997) include:

Strengths

1. Gives focus to educational evaluation by paying attention to the decisions of program managers that would prevent evaluators from pursing unproductive evaluation study.
2. Allows evaluation of a program at any given stage of its implementation.
3. Preferred approach amongst most program managers and officials at the decision making level.
4. Stresses the importance of the use of evaluation information by decision-makers.
5. Helps evaluators generate questions that would guide the different stages of the evaluation process.
6. Questions generated during the four phases of the evaluation, makes it easy to explain the evaluation to the stakeholders.
7. Allows the decision-makers to get feedback, which they can use to improve on the program while the program is still being implemented.

Weaknesses

1. Preference is given to top level management staff that may not represent the interest of the others involved in the program being evaluated.
2. Costly and complex to use when conducting evaluation study.
3. Operates on assumptions about the orderliness and predictability of the decision-making process, which at times are not so orderly.
4. Collaboration required between the evaluator(s) and the decision-maker(s) may introduce bias into the results of the evaluation.

To guard against the limitations of the management-model and for that matter, all evaluations, the use of meta-evaluation has been advocated (Scriven, 1967; Stufflebeam & Webster, 1994; Program Evaluation Standards (Joint Committee on Standards for Educational Evaluation, 1994). Meta-evaluation involves an evaluation of an evaluation by an independent evaluator or evaluation team.

Definition of Program Evaluation Used in the Present Study

The evaluation framework used in the present study was the CIPP model proposed by Stufflebeam (1971). In adopting this model, the definition or purpose of program evaluation was that proposed in the Program Evaluation Standards (Joint Committee on Standards for Educational Evaluation, 1994). Stufflebeam was one of the principal authors of the Standards. Consequently, it was felt that the Joint Committee's definition would fit with the four components of the CIPP model. This definition of evaluation is "the systematic investigation of the worth or merit of an object" (Joint Committee on Standards for Educational Evaluation, 1994, p. 3).

The Context, Input, Process, Product Model

The name of the model developed by Stufflebeam (1971) reflects the four components or stages of this model. These four components and the interrelationships among them are displayed in Figure 4.

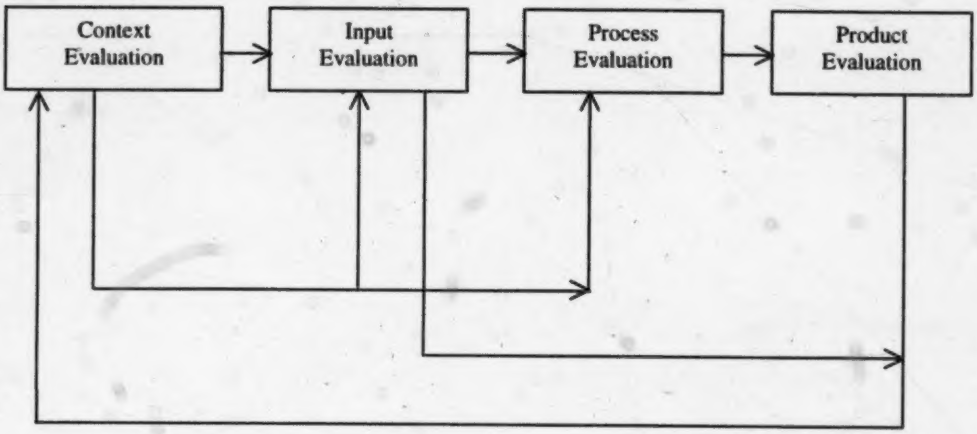

Figure 4. The CIPP Model.

Context evaluation involves identifying needs and problems of an educational program (Gall, Borg, & Gall, 1996). Methods used in this first phase of the evaluation process include interviews, surveys, needs assessment, document review, hearing, diagnostic tests, and the Delphi technique (Stufflebeam, 1983).

Input evaluation concerns making judgments and decisions about the resources that are needed to accomplish the goals and objectives of an educational program (Gall et al., 1996). This second phase utilizes methods such as literature and document reviews, visits to exemplary programs, pilot trials, and advocate teams (Stufflebeam, 1983).

Process evaluation involves collecting data during implementation of the program to be evaluated. This can be achieved by describing the actual implementation of the program (for example, teaching, student activities, materials used) and by observing the activities of project staff (Stufflebeam, 1983).

Product evaluation deals with the collection of "outcome" data to be used in measuring, interpreting and judging the effectiveness of the program (Stufflebeam, 1983). The methods used in this final phase of the evaluation include collecting judgments of outcomes from the stakeholders (for example, levels of achievement, rate of recidivism) of the program.

Use of the CIPP Model of Evaluation

Kemp (1981), Maher (1982), Giberg and Scholwinski (1983), Nicholason (1989), Moore (1990), Campbell and Martin (1992), Smith and Hauer (1990), Norton (1990), Mattox (1991), Harrison (1993), Dodson (1994), Moussa (1996), Fritz (1996), Taylor (1998), and Dworaczyk (1998) have used the CIPP model to evaluate programs ranging from pre-kindergarten education programs to higher education programs. Many evaluators have also used the CIPP model in combination with two or more models in one study. Fortney (1988) used the CIPP model, Tyler's (1942) Behavioral evaluation model, and Stake's (1967) Responsive Model to conduct a follow-up study of students in rural secondary gifted programs. And Moussa (1996) used naturalistic methods of inquiry to collect data for the evaluation of a post-literacy program in Niger, and then used Stufflebeam's CIPP model for data analysis.

Three of the above referenced studies by Mattox (1991), Fritz (1996), and Taylor (1998) are discussed below to illustrate how the CIPP model has been used in evaluating educational and training programs at the post-secondary level. Mattox (1991) evaluated the Theological Education by Extension (TEE) program at the Center for Christian Studies in Northwest Mexico by adopting the CIPP model. In this study, 16 courses in the curriculum were used to assess the impact of the program on the participants, the strength and weaknesses of the program were identified, and the attitudes of the participants toward the program were measured. A second purpose of the study was to provide an example for evaluating other similar TEE programs throughout Latin America. The study was guided by 10 specific evaluation questions which were arranged according to the four phases of the CIPP model [(a) assessing the needs, (b) building the curriculum, (c) carrying out the program, and (d) assessing the results]. The data collection in each phase of the evaluation included the use of surveys, interviews, and document reviews. The findings provided answers to the 10 evaluation questions, and led to recommendations that would be used for the revision of TEE programs at the Center for Christian studies in Northwest Mexico.

In the second study, Fritz (1996) assessed the undergraduate student needs in the College of Forestry, Wildlife, and Range Sciences at the University of Idaho. Initially, the purpose of this study was to assess the undergraduate student needs using the four phases of the CIPP model. However, Fritz split the evaluation into two separate studies. In the first study, the context evaluation phase was used to assess the needs of the undergraduate students, while the input evaluation phase was used to identify selected strategies to be used in addressing the needs. In the second study, process evaluation was used to assess students' needs and to determine if the objectives were being achieved as planned, while the product evaluation was used to provide decision-makers with information required for deciding whether the selected strategies should be discontinued, modified, or eliminated.

In the third study, Taylor (1998) conducted a case study in which the CIPP model was used to examine the quality of maintenance training program for Navy's E-6A aircraft. The program managers of this training institution were interested in knowing the instructional effectiveness of panel trainers, which involved large-scale working models of aircraft subsystems, and the consequences of a proposed solution of using computer-based training. To evaluate this program, Taylor collected data pertaining to the maintenance training program at the four stages of the CIPP model. The results of this study led to the recommendation for a change in the instructional approach used in the program.

In each of these studies, the evaluators made recommendations based on their findings for the improvement of the programs. Stufflebeam (1983) suggested including recommendations based on the findings of the evaluation in an evaluation report in order to assist the decision makers or administrators with subsequent decisions about the program. In doing so, he clearly delineated the role of the evaluation and the role of the decision-maker as different; the evaluators were not the decision-makers.

Summary

The Government of Jamaica in 1958 established CAST as it was formerly called. In the year 1995 CAST was granted the status of a university, and the name changed to the University of Technology, Jamaica (UTECH). The B. Ed. Business Education programs did not begin until the summer of 1982.

At present, UTECH is organized in five faculties: The Built Environment, Engineering and Computing Studies, Health and Applied Science, Business and Management, and Education and Liberal Studies. The B. Ed. Business Education program is located in the Faculty of Education and Liberal Studies. Further, the B. Ed. Business Education includes Business Studies and Secretarial Studies programs. The basic structure of the B. Ed. degree programs in Business Education consists of three modules for both the Business Studies and Secretarial Studies specializations.

In the area of program evaluation different scholars hold different views about the roles of evaluation. These different views are responsible for the different evaluation approaches, namely, Objective-oriented approaches, Management-oriented approaches, Consumer-oriented approaches, Expertise-oriented approaches, Adversary-oriented approaches, and Participant-oriented approaches (Worthen et al. 1997). The evaluation approach (CIPP model) used in this study is classified under the Management-oriented approaches. Cronbach (1963) and Stufflebeam (1968) pioneered the Management-oriented approach to evaluation. The CIPP model is seen as one that can be used proactively to help improve a program as well as to judge its worth.

THREE CHAPTER

METHOD

The procedures used to evaluate the B. Ed. Business Studies and Secretarial Studies programs at UTECH are described in this chapter. The chapter is organized into the following eight sections: (a) Evaluation Design, (b) Population, (c) Sample, (d) Instrumentation, (e) Instrument Review, (f) Procedure, (g) Document Study, and (h) Data Analysis.

The use of mixed methodology, that is, the combination of qualitative and quantitative approaches (Tashakkori & Teddlie, 1998), has been advocated for evaluations so as to yield a more comprehensive set of data than if either of the approaches are employed alone. This combined approach is a feature of the CIPP model (Stufflebeam, 1971) and is advocated by others such as Patton (1980). The use of multiple sources of information provides a comprehensive perspective on the B. Ed. Business Studies and Secretarial Studies programs to be evaluated.

Evaluation Design

The CIPP model was selected for this study because the aim of the CIPP evaluation process is not to "prove" but to "improve" programs (Stufflebeam, Madus, & Scriven, 1983). As a four stage evaluation model, it provides a framework for a comprehensive evaluation of a program beginning with program inception, through implementation of the program and, following implementation, the products or results of the program as implemented. As a broad-based evaluation model, it allows for the use of multiple methods which improves the validity, objectivity, and reliability of the evaluation study. Finally, the CIPP model provides information for building program excellence, staff development, and accountability (Slavenas & Nowakowski, 1989). Presented in Table 1 is an outline of the CIPP model as applied in the present study.

Context Evaluation

As suggested by Stufflebeam (1971), the context evaluation stage involves definition of the operation context, and needs identification and assessment. To meet the objectives of the context evaluation in the present study (See Table 1), selected senior administrative and academic staff and officials from the funding agencies were individually interviewed. Focus group interviews were conducted with the students, and questionnaires were administered to the students and instructors in the B. Ed. Business Education programs. Further, document review was conducted. The purposes of these interviews and questionnaires were to: (a) identify the mission statement of the B. Ed. degree programs in UTECH; (b) identify the philosophy and objectives of the B. Ed. Business Studies and Secretarial Studies programs; (c) identify the objectives of the B. Ed. degree programs in UTECH; (d) determine the expected student outcomes of the B. Ed. Business Studies and Secretarial Studies programs in UTECH; (e) verify if the philosophy and objectives of the B. Ed. Business Studies and Secretarial Studies programs serve as effective guides to the implementation of the program; (f) and to identify the intended students to be served by the B. Ed. Business Studies and Secretarial Studies programs.

Table 1
Application of CIPP Evaluation Model to B. Ed. Business Education Programs in UTECH

	CONTEXT EVALUATION	INPUT EVALUATION	PROCESS EVALUATION	PRODUCT EVALAUTION
Objective	To identify the stakeholders' needs, goals of the program, limitations of the program, and availability of staff and the actual facility	To identify the program capabilities, and to assess what changes are needed	To provide feedback to decision makers about the extent to which the program activities are being implemented, and to provide guidelines for program modification	To measure acquisition of knowledge and skills of the students in the program and to compare outcomes to objectives, to collect data on graduates of the program, and compare outcomes to objectives
Method	By using interviews, surveys, document reviews, and test score data	By conducting a search of program documents	By monitoring the program through observation and recording the activities that take place	By measuring changes in performance and making comparisons using quantitative analyses
Relation to decision making in change process	For deciding whether program goals and objectives are appropriate and to decide if stakeholders' needs are adequately met	For correcting program design and reallocating resources	For refining the program and improving the delivery of the program. To interpret outcomes	For deciding whether the program should continue, be modified or be terminated

Adapted from Stufflebeam (1983, p. 129).

Input Evaluation

In order to achieve the goals of the input evaluation stage, Stufflebeam (1971) indicated the need to identify and assess program capabilities. To meet this need during this phase of the present evaluation, program documents and records were reviewed in order to determine the capabilities of the B. Ed. Business Studies and Secretarial Studies programs for achieving its goals. Furthermore, as part of the individual interviews with the B. Ed. program administrators, questions were asked to further identify and assess (a) the governance and administrative structure of the B. Ed. degree programs; (b) identify the intended and actual curriculum of the B. Ed. Business Studies and Secretarial Studies programs; (c) determine the number and qualifications of the staff in the B. Ed. Business Studies and Secretarial Studies programs; (d) assess the resources made available for the B. Ed. Business Studies and Secretarial Studies programs; and (e) determine how well the entry requirements were met.

Process Evaluation

The process evaluation stage includes monitoring program activities in order to describe the procedural events and activities and to identify any particular strengths and weaknesses of a program (Stufflebeam, 1971). To explain the processes being used in the B. Ed. Business Education programs and to identify their merits and defects, observations of the summer classes in each summer component were conducted by the evaluator and a trained research assistant. Classes in six different courses were observed four times and the observed activities were recorded on a scale. Focus group interviews were conducted with the students and questionnaires were administered to the students and instructors. The purpose of these interviews and questionnaires was to gather information about: (a) program quality; (b) quality and adequacy of course components; (c) overlap course content; (d) importance and relevance of courses; (e) quality of instruction; (f) quality of evaluation; (g) quality and adequacy of resources; (h) suitability of the modular system; and (i) factors that enhance, affect, or pose threats to the implementation of the programs.

Product Evaluation

Product evaluation is the final phase of the model. During this stage, program outcomes are related to program context, input, and process data (Stufflebeam, 1971). At this stage of the evaluation, data were gathered through focus group interviews with the students in the B. Ed. Business Studies and Secretarial Studies programs. As well, the students, graduates, and instructors completed questionnaires designed to assess program outputs, and principals appraised the teachers in their schools who had graduated from the two programs. The purpose of these interviews, questionnaires, and appraisals was to gather information about: (a) students academic performance in the B. Ed. programs; (b) students and graduates attitude toward the B. Ed. program; (c) level of graduates' job performance; (d) success rate in the B. Ed. programs; (e) the strengths and weaknesses of the B. Ed. programs; and (f) how good the modular system is in meeting the B. Ed. program objectives. A document review of student academic records was completed in order to assess the performance of students and graduates and to determine completion rates.

Population

The target population of this study consisted of the different stakeholders who have an interest or stake in the B. Ed. Business Studies and Secretarial Studies programs. According to Rutherford (1989),

> All persons or groups who will be expected to use or respond to evaluation findings should have input into the evaluation process. This includes faculty and administrators who will be expected to implement the findings as well as those who will be responsible for guiding the implementation effort. Students should also be involved if they will be in any way influenced by implementation of the findings. (p. 220)

The stakeholder groups for this study included: students currently in the B. Ed. Business Studies and Secretarial Studies programs; instructors in this program; senior administrative and academic staff who were responsible for the implementation of the program; graduates of this program; and employers of these graduates. Officials of the funding agencies were also part of the stakeholder group. These agencies included the Government of Jamaica through the Ministry of Education and Culture (MOE&C) and the Canadian International Development Agency (CIDA).

Sample

The number of participants for each stakeholder group is listed in Table 2. As shown in this table, no sampling was performed for students, instructors, and the CIDA official. All of the students, instructors, and the CIDA officer were included in the study. The graduates and their employers (principals of high schools), the administrative and academic staff, and the officials of the MOE&C were obtained through the use of purposive sampling method (Kidder, 1981; Lincoln & Guba, 1985). According to Kidder (1981),

> If the goal is to obtain ideas, good insights and experienced critical appraisals, one selects a purposive sample with this in mind. The situation is analogous to one in which a number of expert consultants are called in on a difficult medical case. These consultants - also a purposive sample - are not called in to get an average opinion that would correspond to the average opinion of the entire medical profession. They are called in precisely because of their special experience and competence. (p. 440)

Table 2

Population and Sample Sizes for Students, Graduates, Instructors, Administrators, and Funding Agencies

Participants	Number in Population	Number Sampled
Current UTECH President	1	1
Past UTECH President	1	1
Vice Presidents	4	1 (Academics)
Director, Human Resources	1	1
Dean, Faculty of Education & Liberal Studies	1	1
Head, School of Technical & Vocational Education	1	1
Head, Dept. of Humanities & Liberal Studies	1	1
B. Ed. Program Coordinator	1	1
Instructors in the B. Ed. Business Edu. programs	22	22
B. Ed. Business Studies Students:		
Module One	23	23
Module Two	30	30
Module Three	24	24
B. Ed. Secretarial Studies Students:		
Module One	15	15
Module Two	18	18
Module Three	20	20
Graduates:		
Business Studies	64	64
Secretarial Studies	67	67
High School Principals	95	63
Project Officer (CIDA)	1	1
Senior Education Officers (MOE&C)	6	3
Total	553	358

Students. Presented in Table 3 is a summary of the number of students by specialization, module, and nationality. In the 1999/2000 academic year, 130 students were registered in the B. Ed. Business Studies and Secretarial Studies Programs. A total of 77 students registered in the three summer components for Business Studies, and a total of 53 students registered in the three summer components for Secretarial Studies.

Of the 77 Business Studies students, 75 were Jamaicans while 2 were non-Jamaicans. At the time of this study, five of the Business Studies students were repeating or had not completed the required course work in Module Three. In the Secretarial group, a total of 53 students were registered in the three modules. Of the 53 Secretarial Studies students, 50 were Jamaicans while three were non-Jamaicans. At the time of this study, one of the Secretarial Studies students had not completed the required course work in Module Three.

Table 3

Number of Students by Specialization, Module, and Nationality

Specialization	Number currently registered	Repeat students	Jamaicans	Others	Number sampled
Bus. Studies:					
Module One	23	0	23	0	23
Module Two	30	0	30	0	30
Module Three	24	5	22	2	24
Subtotal	77	5	75	2	77
Sec. Studies:					
Module One	15	0	14	1	15
Module Two	18	0	17	1	18
Module Three	19	1	19	1	20
Subtotal	53	1	50	3	53
Grand Total	130	6	125	5	130

Graduates and their employers. Since 1986 there have been a total of 288 graduates from the B. Ed. Business Education programs. This figure is based on the list of graduates provided by Records Office. Of the 288, 116 were from the Business Studies Program and 172 were from the Secretarial Studies Program (see Table 4).

Table 4
Number of Graduates by Specialization and Nationality

Specialization	Total in population from 1986-1999	Jamaicans	Others	Number sampled
Bus. Studies	116	103	13	60
Sec. Studies	172	141	31	64
Total	288	244	44	124

Within the group of 116 Business graduates, 103 were Jamaicans and 13 were non-Jamaican; within the group of Secretarial graduates, 141 were Jamaicans and 31 were non-Jamaicans. It was not possible to determine the actual number of graduates who were teaching since no official record of employment of graduates was kept at UTECH. The sample of graduates and their employers was purposely selected from the graduates presently teaching in schools.

In order to select graduates and their employers, the evaluator used the Jamaica School Profiles (1996-97) and the Jamaica Directory of Educational Institutions (1998-99) as guides. The School Profiles and the Directory of Educational Institutions are annual publications of the MOE&C.

There are 14 parishes in Jamaica. Within these parishes, there are six educational regions for public educational institutions in Jamaica (Jamaica School Profiles, 1996-97).

These regions include Kingston, Port Antonio, Brown's Town, Montego Bay, Mandeville, and Old Harbour.

Of the 14 parishes, seven parishes located in three regions were included in the present study. The three regions and the seven parishes together with the kind and number of schools are listed in Table 5. As indicated in this table, one parish St. Thomas,

Table 5
Schools by Region and Parish

Region	Parish	Secondary High	Comprehensive High	Technical High	Community College	Total
Kingston	Kinston	8	4	2	0	14
	St. Andrew	16	11	1	1	29
	St. Thomas	3	1	0	0	4
	Total	27	16	3	1	47
Port Antonio	St. Thomas	0	0	1	0	1
	Portland	2	3	0	0	5
	St. Mary	4	2	0	0	6
	Total	6	5	1	0	12
Old Harbour	Clarendon	9	6	1	1	17
	St. Catherine	9	7	2	1	19
	Total	18	13	3	2	36
Grand Total		51	34	7	3	95

Adapted from Jamaica School Profiles (1996-97, p. v).

is not wholly contained within a specific region. The Business Studies and Secretarial Studies degree graduates were employed in 51 secondary high schools, 34 comprehensive high schools, 7 technical high schools, and 3 community colleges.

For each parish, schools were chosen so that all the four school types (secondary, comprehensive, technical, and community colleges) were included. Further, to the extent possible the sample was selected to include schools classified by MOE&C as urban and rural, co-educational shift and co-educational whole day, and single educational shift and single educational whole day. Since there was no existing list of schools where Business Studies and Secretarial Studies degree graduates could be found, it was necessary to visit the schools. Consequently, the sample was not random. The final sample is provided in Table 6.

As shown in Table 6, 12 co-educational shift high schools, 32 co-educational whole day high schools, and 12 single educational whole day high schools in the urban areas were visited. One co-educational shift and eight co-educational whole day schools located in the rural areas were visited. Thus, 63 schools were included in the school sample.

All the graduates of the B. Ed. Business Studies (64) and Secretarial Studies (67) programs in each of the sampled schools were asked to participate in the study.

Instructors. There were 22 instructors teaching in the B. Ed. Business Studies and Secretarial Studies programs at the time of this study. All the instructors were invited to participate in the study.

Administrative and academic staff, and officials of the funding agencies. There were 15 administrative and academic staff at UTECH at the time of this study. Of this number, nine were selected: Current President; Former President; Vice-President (Academics); Director, Human Resource Management; Librarian; Dean of Faculty of Education and Liberal Studies; Head of School of Technical and Vocational Education; Head of Department of Humanities and Liberal Studies; and B. Ed. Program Coordinator. These nine persons had knowledge of the B. Ed. Business Studies and Secretarial Studies programs. In the MOE&C, there were six educational officials in charge of the educational regions in Jamaica. Of this number three were selected through purposive

Table 6
Final Sample of Schools

Stratum	Number of Schools	
Urban Schools	Population	Sample
Co-educational shift	18	12
Co-educational whole	50	32
Single educational shift	0	0
Single educational whole	14	12
Total	82	54
Rural Schools		
Co-educational shift	1	1
Co-educational whole	12	8
Single educational shift	0	0
Single educational whole	0	0
Total	13	9

sampling method. These three officials had knowledge of the B. Ed. Business Studies and Secretarial Studies programs and who knew many of the B. Ed. Business Education graduates included in this study. In the CIDA office in Kingston, there was only one Project officer. This officer was approached to participate in the study.

Instrumentation

Questionnaires

Five questionnaires were used. These included three different questionnaires for the students in the three modules, a questionnaire for the instructors, and a questionnaire for the graduates from the B. Ed. Business Studies and Secretarial Studies Programs.

Questionnaire for students and graduates. There were four versions of this instrument, one for each of the three modules in the B. Ed. Business Studies and Secretarial Studies Programs, and the fourth for the graduates. The graduates had a different but similar instrument. Tables 7 and 8 contain summaries of the common sections and items in the student and graduate questionnaires.

An attempt was made to construct items that measured the context, input, process, and product aspects of the B. Ed. Business Studies and Secretarial Studies Programs at UTECH. Each questionnaire consisted of two sections. Section A contained four-point Likert type items (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree) designed to obtain information from the participants about their needs and concerns about the B. Ed. Business Studies and Secretarial Studies Programs and what they perceived to be problems underlying the needs and the merits of the programs.

Table 7
Common Sections: Section A, Part 1

Section A: Part One	Participants				Number of Items
	Module 1	Module 2	Module 3	Graduates	
Program quality	Items 1 - 14	Items 1 - 14	Items 1 - 14	Items 1 - 14	14
Student satisfaction	15 -26	15 -26	15 -26	15 -26	12
Quality & adequacy of course content	27 - 36	27 - 36	27 - 36	27 - 36	10
Quality of instructors & instruction	37 - 54	37 - 54	37 - 54	37 - 54	18
Quality & adequacy of resources	55 - 84	55 - 84	55 - 84	55- 84	30
Quality of evaluation	85 - 98	85 -105	85 - 105	85 - 105	Mod.1 = 14 Others = 21
Courses	99 - 102	106 - 109	106 - 109	106 - 109	4

Section A was divided into two parts (see Tables 7 and 8). Part One contained four-point Likert type items to obtain students and graduates perceptions about program quality (items 1-14); student/graduate satisfaction (items 15-26); quality and adequacy of course content (items 27-36); quality of instructors and instruction (items 37-54); quality and adequacy of resources (items 55-84); and quality of evaluation (items 85-98 for Module One, items 85-105 for Modules Two and Three and graduates). The seven additional evaluation items in Modules Two and Three and graduate questionnaires pertained to final examinations. Items 99-100 (for Module One) and 106-107 (for Modules Two and Three and graduates) employed a four-point Likert-type format (1 = not very important/not very relevant, 2 = not important/not relevant, 3 = important/relevant, and 4 = very important/very relevant) to assess the importance and relevance of the courses in the programs. The next two items, 101-102 for Module One and 108-109, for Module Two and Three and the graduates were open-ended and worded to obtain suggestions for improving the courses.

In Section A (Part Two), the Module One students' questionnaires contained eight items, while Module Two and Three students' questionnaires contained 11 items. This was because at the time of this study, the Module One students were new in the program. These items, which were also open-ended, were designed to obtain information about the strengths and weaknesses of the programs, suggestions for improving the programs, and the needs and expectations of the students (see Table 8).

In the graduates' questionnaires, Section A (Part Two), contained 22 items. (110-129). Item 110, was closed-ended and was designed to measure graduates' views about the modular system of list of options. The remaining 21 items were open-ended and designed to obtain their perceptions about the total B. Ed. Business Studies and Secretarial Studies programs (see Table 8).

Table 8

Common Sections: Section A, Part Two

Section A: Part Two	Participants				Number of Items
	Module 1	Module 2	Module 3	Graduates	
Modular system	Items 108 -110	Items 115 -117, 119	Items 115 -117, 119	Items 115 -117, 119	Mod. = 3 Others = 4
Reasons to withdraw	103	110	110		1
Strengths & weaknesses	104	111	111	111	1
Beneficial aspects	105	112	112	110 112	Students = 1 Grads. = 2
Areas to improve	106	113	113	113	1
Needs & expectations	107	114	114	114	1
Problems	-	118	118	118	1
Factors that enhance	-	120	120	120	1
Factors that affect	-	121	121	121	1
Factors that pose threats	-	122	122	122	1
Overall view of training	-	-	-	123-130	7

Section B was designed to obtain a bio-demographic description of the students and graduates. The variables considered together with the item numbers are listed in Table 9.

Table 9
Section B, Demographic Data

Section B	Participants				Number of Items
	Module 1	Module 2	Module 3	Graduates	
Gender	Items 111	Items 123	Items 123	Items 131	1
Age	112	124	124	132	1
Level of education	113	125	125	135	1
Teaching experience	114	126	126	136	1
Year of graduation	-	-	-	133	1
Areas of specialization	-	-	-	134	1
Employment status	-	-	-	137	1
Attending college	-	-	-	138-139	2
Nationality	115	127	127	140	1

The variables considered for all students and the graduates included gender, age, qualification, teaching experience, and nationality. The graduates were also asked to provide their year of graduation, area of specialization, employment status, and if they were presently attending a college or university. Copies of students' and graduates' questionnaires are provided in Appendix A.

Questionnaire for instructors. The instructors' questionnaire consisted of two sections. Section A consisted of three parts. Part One started with 43 four-point Likert type items (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree) pertaining to program quality (items 1-14) and instructors' self-evaluation (items 15-43). Part Two contained 44 open-ended items that sought information from the instructors about student performance (items 44-51); quality and adequacy of course content (items 52-60); quality of instruction (items 61-65); quality and adequacy of resources (items 66-82); and quality of evaluation (items 83-89).

Part Three of the instructors' questionnaire consisted of 16 semi open-ended items (yes/no format with reasons) and open-ended items. These items sought answers about the strengths and weaknesses of the B. Ed. programs; factors that enhance and affect program implementation; possible future threats to the programs; areas that need improvement; and workload.

Section B was designed to obtain a bio-demographic description of the instructors. The variables (items 106-111) considered for the instructors included were they attending college or university, qualifications, teaching experience, employment status, gender, and nationality. A copy of the instructors' questionnaire is provided in Appendix B.

Table 10

Section A, Part One and Corresponding Items for Instructors

Section A	Item	Total Number of Items
Part One:		
Program quality	1 - 14	14
Instructor self-evaluation	15 - 43	29
Part Two:		
Students' performance	44 - 51	8
Quality & adequacy of course content	52 - 60	9
Quality of instruction	61 - 65	5
Quality & adequacy of resources	66 - 82	15
Quality of evaluation	83 - 90	8
Part Three:		
Strengths and weaknesses	91	1
Factors that enhance	92	1
Factors that affect	93	1
Threats	94 - 95	2
Areas to improve	96	1
Workload	97 - 105	9

Appraisal Scale for Graduates

The appraisal scale used for the graduates was an adaptation of the scale developed by Martin (1966). It was designed to provide an evaluation of the graduates.

To be completed by the principals, the scale had three parts. Section A consisted of five items that pertained to the demographic data about the principal and the graduate being rated. Section B contained 14 six-point Likert items pertaining to teaching quality and attitude of the graduate teacher. The points were 1 = unacceptable work performance, 2 = below average work performance, 3 = average work performance, 4 = above average work performance, 5 = good work performance, and 6 = excellent work performance. Section C contained two open-ended items designed for the principals to provide written comments about the graduates and suggest recommendations on areas that they saw needing improvement. A copy of the appraisal scale for graduates is provided in Appendix C.

Interview

Two types of interviews were conducted: individual and focus groups. A semi-structured interview guide was used for all the interviews. All interview questions were framed around the evaluation questions guiding the study (see pp. 5-7). Probes were used to encourage elaboration and to clarify responses where needed. A copy of the interview guides is provided in Appendix D. It was intended that all interviews would be audio-taped for later transcription and analyses. Interviewees chose convenient dates and the place for their interviews (see Appendix D for the list of persons interviewed with dates). However, only two agreed to be audio-taped. The responses of the other 10 were recorded by hand.

Class Observations Scale

The observation scale was divided into two sections. Section One contained two parts. Part A contained items designed to obtain a description of the course, number of students in the class, date, time, program of study, module, and observer. Part B contained items on the delivery of instruction and was subdivided into four subsections: suitability of content, organization of content, presentation style, and evaluation methods. The response format for the items in Part B was 6-point Likert format (not applicable = 1, poor = 2, need improvement = 3, satisfactory = 4, very satisfactory = 5, and excellent = 6). Section Two consisted of four open-ended items that allowed the observers to make comments on clarity of objectives, instructional methods, course activities, course organization, pace of the class, time allotted for the class, and most and least valuable aspects of the class observed. A copy of the observation scale is provided in Appendix E.

Instrument Review

Questionnaires. The student and instructor questionnaires were reviewed by a sample of 144 students and five instructors in the diploma Business Education programs offered by the Faculty of Education and Liberal Studies. This review was conducted during the month of May 1999. The Module One student instrument was reviewed with year one diploma students, the Module Two instrument was reviewed with second year diploma students, and the Module Three questionnaire was reviewed by the final year diploma students. Five instructors from the diploma Business Education programs reviewed the instructors' questionnaires. The diploma students and instructors could not respond to the items on the questionnaires since they were not participants in the B. Ed. Business Education programs. Instead, they were asked to check the pertinence of each item to the program and to make comments or suggestions for improving the clarity and understanding of the items in the questionnaires. The students and instructors were given one week to return the questionnaires. The comments and suggestions provided were used to modify and clarify the questionnaires.

Appraisal scale. The graduate instruments and appraisal scale for the high school principals were also reviewed during the month of May by graduates from the Business Education diploma programs and their principals. In all 10 diploma graduates and 10 principals were used for this exercise. The diploma graduates and their principals were asked to read through the instruments and make comments and suggestions. These comments and suggestions were used to revise the items in the graduate appraisal instruments.

Interview. A review of the interview questions was conducted using a sample of six students in the Business Education diploma programs who volunteered for the review of the questionnaires, and two administrative staff who were not included in the main study. The interview review sessions were conducted during May. These reviewers were asked to check whether or not the questions were valid and relevant for the purposes of the evaluation study.

Procedures

Ethical Issues

Data collection did not take place until the Ethics Review Committee of the Department of Educational Psychology, University of Alberta had provided ethical clearance and the President of UTECH had provided written permission to conduct the study. Copies of the approval letters and the request to conduct the study are provided in Appendix F. Other senior administrative and academic staff members were provided a copy of the President's response at the beginning of their interviews. Each interview began with a description of the purposes and procedures of the study, and the importance of the findings for improving the B. Ed. Business Studies and Secretarial Studies programs. Given this information and prior to beginning the data collection, each person was asked to sign a consent form. Similarly, instructors who agreed to have their classes observed were provided with a consent form prior to the observations being made.

Participants who volunteered to complete a survey questionnaire were provided with a copy of a cover letter, consent form, and their survey questionnaires. The cover letter described the purposes and importance of the study, a time limit for completion of the questionnaire, and assurance of confidentiality. Copies of the cover letters and consent forms are provided in Appendix G.

To ensure that the evaluation was ethically conducted, the data collection and reporting procedures were conducted in compliance with the Propriety Standards found in the Program Evaluation Standards (Joint Committee on Standards for Educational Evaluation, 1994).

Research assistant. A second year student from the Faculty of Social Sciences, University of the West Indies, Mona campus, and who had completed a course in social science research methods was hired to assist with the observation of the classes and to collect and review the survey questionnaires for completeness of response. For the observations, the observation scale was reviewed with the assistant after which two mock classroom observations were made. The mock observations were conducted in two different classes in the Business Education diploma program and with the permission of the instructors of these two classes. In both cases, both the evaluator and the research assistant made their observations independently. The inter-rater reliability coefficient across the two observations was 0.90; differences were discussed and resolved. The evaluator and the research assistant worked together to check survey questionnaires completeness and follow-up respondents with missing data.

Data Collection

Student questionnaires. The student questionnaires were distributed by the evaluator to the students in their classes. The students were asked to complete their questionnaires and return them one week later. At that time the evaluator or research assistant returned to the class to collect completed questionnaires and to encourage those who had not and set a new due date for them (see Appendix H for a copies of the follow-up letters). Upon receipt, each completed questionnaire was quickly reviewed for completeness. When missing data were found, the students were contacted and asked to provide it. Providing the questionnaires directly to the students, collecting them directly, and quickly following up missing responses helped to ensure a high response rate (see Chapter Four) and a low level of non-response at the individual item level.

Instructor questionnaire. A similar procedure was followed to administer the questionnaires to the instructors. The questionnaires were directly delivered to them during the staff meeting to mark the start of the B. Ed. summer component. One week was allowed for response after which each instructor was contacted directly to collect their completed questionnaires. Again, the questionnaires were quickly reviewed, and non-response followed up. A follow-up letter with a new due date was issued directly to non-respondents who did not respond to the verbal request (see Appendix H for a copy of the follow-up letter). While the response rate for the instructors was not as high as for the students (see Chapter Four), the rate was still quite high.

Graduate questionnaire and principal appraisal scale. The graduate questionnaires and principal appraisal scale were delivered either in person by the evaluator to the graduates and the principals in schools that were easy to travel to or administered by telephone. In the case of the schools to which travel was possible, the graduates and principals were asked to complete their questionnaire or scale within two weeks. At the end of the two weeks, non-respondents were sent a follow-up letter and a second "due" date. Non-respondents who failed to meet the second due date were again sent a follow-up letter. Copies of the follow-up letters are provided in Appendix H.

Individual Interviews. The eight senior administrative starf, three Ministry of Education officials, and the official from CIDA were sent a letter outlining the purposes of the study and requesting permission to interview them to obtain needed information (see Appendix I for a copy of the letter). To encourage cooperation and in recognition of their busy schedule, the date and location were arranged mutually with each person to be interviewed. The participant's rights were explained at the beginning of each interviews. The purpose of the interview was then described and permission to use the tape recorder was obtained. The individual interviews lasted from 45 to 60 minutes. The two audio-taped were transcribed. The written records of each interview were interpreted and summarized. In the case of two of the 12 persons interviewed, it was necessary to contact them for clarification of information they provided.

Focus group interviews. All students in both Business and Secretarial Studies groups, Modules One to Three, were invited to take part in focus groups interviews. A request form was provided at the end of the students' questionnaires. Students who wished to participate in the focus group interviews were asked to indicate their interest.

The interviews were conducted in informal, small-groups (Dean, 1994). Students shared and discussed their views, opinions, perceptions, experiences, needs, and concerns about the B. Ed. Business Studies and Secretarial Studies Programs. Altogether six focus groups meetings were held, one for Business Studies students and one for Secretarial Studies students in each of the three modules. Each focus group had a minimum of six students and a maximum of eight students. All the focus group interviews were audio-taped.

The focus group interviews were conducted on Monday through Thursday. Focus group interviews were not conducted on Friday since many of the students traveled to their homes on that day. Since most of the students had classes all day, the interviews were conducted during the lunch break and lasted approximately 45 minutes. As compensation for their time and effort, lunch was provided for all the students who took part in the interviews. The venue for all the focus group interviews was at Farquharson Hall. This venue was selected by the students as a convenient place for them to meet.

Observations. The evaluator and a research assistant each observed two classes at two different dates for each summer component. The core courses Communication Skills and Data Processing 1 (for Module One), Educational Administration and Small Business 2 (for Module Two), and Human Relations and Curriculum Development (for Module Three) were selected. Each class was observed four times between the first and fifth week of instruction by the two observers. This ensured adequate representation of the teaching/learning process that occurred during the summer term. While agreeing to the observations, the instructors indicated that they would only allow one observer to be present in one classroom at one time. However, given the high inter-rater reliability, this was considered not to be a major problem.

Document study. Written historical documents and records were reviewed to obtain information related to the planning for the two programs and the decisions made regarding such things as staff, resources, and operating principles. Program reports, policy documents, institutional records, enrollment records, graduation records, statistical reports, self-study reports, course evaluation reports, minutes of meetings, memos, letters, newspapers, UTECH magazines and journals, speeches, newsletters, and B. Ed. Handbooks were reviewed. Therefore, to ensure accuracy and authenticity of the information gleaned from these documents, an attempt was made to obtain documents from various sources, including the B. Ed. Degree Office, the B. Ed. Program Coordinator's Office, and the UTECH Records Office, and to cross-reference like information for agreement.

In order to establish accuracy and validity of the documents, the following external criticisms were made for each of the documents reviewed: (a) verification of the writer(s) of the documents, to ensure that they were actually written by the person(s) to whom credits was given; (b) verification of the source of the documents, to ensure that the university acknowledged each document as being valid; (c) verification of the face validity of the documents, to ensure that documents were not altered or changed from their original state (Case, Werner, Onno, & Daniels, 1985); and (d) verification of the role of the writer or writers of the document in the program being evaluated. Each document was verified by showing it to the B. Ed. Program Coordinator and asking her questions about it. For example, the B. Ed. Program Coordinator was asked if the writer(s) were involved in the program planning or implementation or witnessed the development of the program.

Data Analyses

Both quantitative and qualitative data analysis procedures were used to analyze the data and information collected. The quantitative analyses are described first followed by the qualitative procedures.

Quantitative analysis for questionnaires and appraisal scales. In analyzing the data collected using the questionnaires and appraisal scales, the evaluator coded the data and entered it on a computer data sheet. The data were entered by the evaluator into an Statistical Package for the Social Sciences (SPSS) data file. After the data entry, each data file was reviewed three times by the evaluator before any analysis was conducted.

After the verification of data entry, an estimate of the internal consistency was conducted for each scale that had a closed-ended format. Cronbach's alpha (Cronbach, 1951) was used for this purpose. It was observed that the internal consistencies for several scales were low, possibly due to the lack of variability. Review of the point-biserial correlation for each item in a scale revealed that scales with internal consistency values of at least 0.53 contained a homogenous set of items. In other scales the internal consistencies were low, suggesting that the items should be analyzed separately. Based on the value of the internal consistency the decision was made on how the items were analyzed for each scale. For example, a set of items with internal consistency of at least 0.53 were analyzed at the scale level, while a set of items with internal consistency lower than 0.53 were analyzed at the item level.

The main statistical procedures used in the study were Univariate Analysis of Variance (ANOVA) tests, followed by the Bonferroni post hoc test where appropriate. An k x 2 (module/graduates-by-program specialization) fully crossed, fixed effects ANOVA was used. The value of k took on values of 4, 3, or 2. For example, when the three student groups defined by module and the graduates were included in the analysis, k = 4; if only Module Three and the graduates were included, then k = 2. The instructors questionnaires and the demographic data collected using surveys for the students and the graduates were analyzed with descriptive statistics.

All inferential tests conducted were at 0.01 level of significance to maintain a realistic error rate (Hummel and Sligo, 1971). It was recognized that multiple tests were used, leading to a higher than 0.01 probability of significance over the full set of questions. However, the incidence of a Type 2 error was considered to be more costly. Failing to find a difference that was really there would not be helpful in improving the B. Ed. Business Studies and Secretarial Studies programs. Consequently, each analysis was at the 0.01 level of significance.

Qualitative analysis for interview data. The two audio-tapes for the two senior administrators and the six focus groups were transcribed. The transcriptions were verified by comparing what was transcribed against what was heard on the tapes, and corrections made where identified. The transcriptions and the hand written notes from the 10 interviewees who did not allow the audio-taping were coded with a combination of figures and letters for easy identification and processing. The transcribing and coding of each interview was completed as soon after the interviews as possible when the information presented in the interview was fresh in the mind of the evaluator. Four steps were used in analyzing the coded data collected. Step 1 involved processing all recorded and handwritten interviews data by transcribing the data through stating of the interview question followed by the interviewees' response(s). At the second step, the responses were sorted into four categories questions organized by CIPP component: context, input, process, product. The items that belonged to the different categories were arranged on paper into three columns: interview responses, extracts from the responses or paraphrases, and themes from the interview responses. Lastly, the themes were further divided into first and second order themes for the purpose of data reduction.

Quantitative analysis for observation scales. The data collected using the observation scales were numerically coded and entered into the computer. The data file was then reviewed three times by the evaluator before any analysis was conducted. After the verification of data entry, descriptive statistics were used to compute the total for all the raters' observations for each section of the observation scale. Responses to open-ended questions were content analyzed. The frequency for each theme was then determined.

Qualitative analysis for document study. Patton (1980) indicated that document "provides a behind-the-scenes look of the program that may not be directly observed and about which the interviewer might not ask appropriate questions without the leads provided through documents" (p. 158). This source of information increases the knowledge and understanding of the program being evaluated. The documents reviewed for this study were paper records. No electronic records were reviewed. This is because at the time of this study, UTECH was still in the process of transferring some of the paper records to electronic records, and accessing the database was a problem.

The information gleaned from the documents reviewed were organized in terms of the evaluation questions to which they pertained. After classifying the information, each document was reviewed to identify highlights or quotes that could be used to amplify or illustrate a finding.

Member checking of qualitative data. In order to verify and validate the interpretations of data collected through the used of interviews and document study with the participants, member checking was conducted (Lincoln & Guba, 1985). To conduct this procedure, the evaluator shared the data collected through interviews and document review with the administrative and academic staff and the interpretations made in order to verify that the data collected were in fact what they were supposed to be and that the interpretations made sense.

Data triangulation. To enhance the validity of data collected through quantitative and qualitative methods, data triangulation was conducted (Duffy, 1987). This process involved clarifying and comparing data collected through document reviews, interviews, observation, and questionnaire methods. When conflicting data or views were found, such data were shown to the B. Ed. Program Coordinator for clarification.

CHAPTER FOUR

RESPONSE RATE AND DEMOGRAPHIC DATA OF THE STUDENTS, GRADUATES, AND INSTRUCTORS

This chapter is organized into three major sections. In the first section, the response rates for students', graduates', and instructors' questionnaires are provided. The response rates for the individual and focus group interviews are provided in the second section. Lastly, the demographic characteristics of students, graduates, and instructors are presented.

Response Rate: Students, Graduates, and Instructors

The response rates for students, graduates, and instructors are reported separately in Table 11. The students were divided into six groups corresponding to the three modules and two specializations.

Students. As shown in Table 11, the overall response rate for students was 90.8% (118 out of 130 students). A total of nine students in Business Studies Modules One and Two and three students in Module Two Secretarial Studies failed to return their questionnaires despite two follow-up attempts. Thus, the response rates for Module One were 87.0% for Business Studies and 100% for Secretarial Studies. For Module Two, the return rates were 80.0% and 83.3%, respectively, while for Module Three the response rate was 100% for both programs. When the evaluator contacted the 12 student non-respondents to enquire why they did not complete and return their questionnaires, she was told, in all cases, that given the demand of their programs, they had insufficient time to complete the questionnaires.

Table 11

Response Rate for Students, Graduates, and Instructors

Groups	Number of Questionnaires Distributed	Usable Returns[a]	Non-Returns	Percentage of Usable Returns
Module One:				
Business	23	20	3	87.0
Secretarial	15	15	-	100.0
Module Two:				
Business	30	24	6	80.0
Secretarial	18	15	3	83.3
Module Three:				
Business	24	24	-	100.0
Secretarial	20	20	-	100.0
Total	130	118	12	-
Graduates:				
Business	64	60	4	93.8
Secretarial	67	64	3	95.5
Total	131	124	7	-
Instructors	19	18	1	94.7
Grand Total	280	260	20	92.9

[a] All returned questionnaires were complete and usable.

Graduates. A total of 64 Business Studies graduates and 67 Secretarial Studies graduates were personally contacted by the evaluator and asked to participate in the study. Of these graduates 60 Business Studies graduates and 64 Secretarial Studies graduates initially volunteered to participate. They were given two weeks to complete their questionnaires. However, six Business Studies and seven Secretarial Studies graduates did not return their questionnaires. Two follow-up letters were distributed to these 13 graduates with new due dates. The follow-up attempt yielded one additional return from the Business Studies graduates and two from the Secretarial Studies graduates. The 10 remaining non-respondents were then contacted by telephone and asked if they would complete the survey over the telephone. One Business Studies graduate and two Secretarial Studies graduates agreed to have the telephone survey. The remaining seven graduates indicated that they were "too busy." Consequently, the overall response rates were 93.8% for the Business graduates and 95.5% for Secretarial graduates.

Instructors. There were 22 instructors in the B. Ed. Business Education program for the summer 1999 session. Three of these instructors indicated that they should not participate in the study since they were fairly new to the program having just been hired. They said that while they were willing, they felt that their knowledge of the two programs was somewhat limited and, therefore, that they would not be able to provide complete answers. Consequently, they were removed from the list of eligible faculty.

Of the 19 eligible faculty, 18 (94.6%) responded completely to the questionnaires. While the remaining faculty member indicated a willingness to participate, she indicated that she was "too busy" to provide a full response. Therefore, her questionnaire was not used. Of the 18 who did respond, 12 taught core courses while the remaining six taught specialist courses.

Response Rates: Individual and Focus Group Interviews

Individual interviews. Of the 13 persons who were contacted for an individual interview, 12 (92.3%) agreed. As shown in Table 12, six were senior administrative staff, three were senior academic staff at UTECH, three were officials from the Ministry of

Education, and one was from CIDA. The one non-respondent, a senior administrative staff member, refused to be interviewed, indicating that he had a busy schedule.

Table 12
Response Rate for Individual Interviews

Interviewees	Number Contacted for Interview	Number Interview	Percentage
Sr. Administrative Staff	6	5	83.3
Senior Academic Staff	3	3	100.0
Funding Agencies:			
MOE&C	3	3	100.0
CIDA	1	1	100.0
Total	13	12	92.3

Focus group interviews. The numbers of students in the three modules who participated in the focus groups are reported in Table 13. As shown, the number of students varied from 12 to 24 across the three modules and the two programs. The students who did not volunteer said they had other engagements. The volunteers in each program were divided into two or three groups with approximately the same number of students in each group (columns 7, Table 13). This grouping was done to facilitate discussion and interaction with the focus group leader.

Table 13
Response Rate for Students in each Module that were Interviewed

Module	Group	Number Contacted	Number Interviewed	Number Refused	Participation Rate	Number[a] per Group
One	Business	23	17	6	73.9	8,9
	Secretarial	15	12	3	80.0	6,6
Two	Business	30	24	6	80.0	8,8,8
	Secretarial	18	15	3	83.3	7,8
Three	Business	24	21	3	87.5	7,7,7
	Secretarial	20	18	2	90.0	9,9
	Total	130	107	23	-	-

[a] Z, Y: Z in one focus group and Y in the second group.

Demographic Characteristics of Students

The bio-demographic characteristics of the 118 students in the three modules who took part in the study are summarized in Table 14.

Gender. As shown in Table 14, the vast majority of students were female. Of the 118 students who completed their survey questionnaires, only eight, all of whom were in Business Studies program (4, 2, and 5, respectively, in Modules One, Two, and Three) were male.

Age. As might be expected, there is a slight increase in age across the three modules, with the students in Business Studies program being somewhat younger than students in the Secretarial Studies program, particularly in Modules One and Two. In Module One, for example, 80.0% of the Business Studies students were less than 33 years of age while 66.7% of the Secretarial Studies students were less than 33. The corresponding percentages for the Module Two and Three students were, respectively, 83.3% and 60.0%, and 66.7% and 60.0%.

Table 14
Demographic Characteristics of Students

Group	Characteristics		Specialization: Business Students (n =20) n	Business Students (n =20) Percent	Secretarial Students (n = 15) n	Secretarial Students (n = 15) Percent
Module One	Gender	Male	4	20.0	0	0.0
		Female	16	80.0	15	100.0
	Age	21-26	10	50.0	6	40.0
		27-32	6	30.0	4	26.7
		33-38	3	15.0	5	33.3
		39-44	1	5.0	0	0.0
		Above 44	0	0.0	0	0.0
	Level of Education	Diploma	20	100.0	15	100.0
	Teaching Experience	None	0	0.0	1	6.7
		1-5	18	90.0	8	53.3
		6-10	2	10.0	6	40.0
		Above 10	0	0.0	0	0.0
	Nationality	Jamaican	20	100.0	15	100.0
		Other	0	0.0	0	0.0
			Business Students (n = 24)		Secretarial Students (n = 15)	
Module Two	Gender	Male	3	12.5	0	0.0
		Female	21	87.5	15	100.0
	Age	21-26	11	45.8	6	40.0
		27-32	9	37.5	3	20.0
		33-38	4	16.7	4	26.7
		39-44	0	0.0	2	13.3
		Above 44	0	0.0	0	0.0
	Level of Education	Diploma	24	100.0	15	100.0

Table 14 (cont.)

	Characteristics		n	Percent	n	Percent
	Teaching Experience	None	2	8.3	1	6.7
		1-5	18	75.0	10	66.7
		6-10	3	12.5	2	13.3
		Above 10	1	4.2	2	13.3
	Nationality	Jamaican	24	100.0	15	100.0
		Other	0	0.0	0	0.0
			Business Students (n = 24)		Secretarial Students (n = 20)	
Module Three	Gender	Male	5	20.8	0	0.0
		Female	19	79.2	20	100.0
	Age	21-26	7	29.2	9	45.0
		27-32	9	37.5	3	15.0
		33-38	5	20.8	4	20.0
		39-44	2	8.3	0	0.0
		Above 44	1	4.2	0	0.0
	Level of Education	Diploma	24	100.0	20	100.0
	Teaching Experience	None	0	0.0	0	0.0
		1-5	10	41.7	13	65.0
		6-10	8	33.3	2	10.0
		Above 10	6	25.0	5	25.0
	Nationality	Jamaican	21	87.5	19	95.0
		Other	0	12.5	1	5.0

Level of education. All the students possessed a Diploma in Business Education. This finding reflects well the requirement that, to be eligible for the B. Ed. Business Studies and Secretarial Studies programs, all students must possess a Diploma in Business Education.

Teaching experience. The Business Studies students had less teaching experience than the Secretarial Studies students in Modules One and Two, but the reverse was the case in Module Three. For example, 90.0% of the Business Studies students in Module One had one to five years teaching experience while 53.3% of the Secretarial Studies students had a similar level of teaching experience. While the difference was not as large for the Module Two students (75.0% versus 66.7%), for the Module Three students, 41.7% of the Business Studies students had taught from one to five years while 65.5% of the Secretarial Studies students had taught from one to five years.

Taken together and accounting for the progression through the three years of the program, these results suggest that for the most part, the demographic characteristics of students first entering the program have remained essentially the same across the three years.

Nationality. All of the students in Module One and Two Business Studies Secretarial Studies, programs were Jamaicans, while in Module Three 87.5% of the Business Studies students and 95.0% of the Secretarial Studies students were Jamaicans. The remaining Business Studies students and Secretarial Studies students were from Britain, St. Lucia and Barbados.

Demographic Characteristics of Graduates

Gender. As shown in Table 15, the vast majority of the graduates were females. Of the 124 graduates who participated in the study, only 11, all of whom graduated from the Business Studies program, were male.

Age. The graduates of the Business Studies program were slightly younger than the graduates of the Secretarial Studies program. For example, 57.7% of the Business

Studies graduates and 68.8% of the Secretarial Studies graduates were less than 33 years of age.

Table 15

Demographic Characteristics of Graduates

Characteristics		Specialization			
		Business Studies Graduates		Secretarial Studies Graduates	
		n = 60	Percent	n = 64	Percent
Gender	Male	11	18.3	0	0.0
	Female	49	81.7	64	100.0
Age	25-30	12	20.0	11	17.2
	31-35	22	36.7	33	51.6
	36-40	21	35.0	15	23.4
	Above 40	5	8.3	5	7.8
Level of Education	Diploma	60	100.0	64	100.0
	B. Ed.	60	100.0	64	100.0
	M. Ed.	1	1.7	1	1.6
	M. Ed.[a]	1	1.7	0	0.0
Teaching Experience	None	9	15.0	6	9.4
	1-5	29	48.3	35	54.7
	6-10	22	36.7	23	35.9
	Above 10	0	0.0	0	0.0
Employment Status	Full-time	60	100.0	64	100.0
Nationality	Jamaican	59	98.3	64	100.0
	Other	1	1.7	0	0.0
Year of Graduation	1990-1991	5	8.3	5	7.8
	1992-1993	6	10.0	10	15.6
	1994-1995	20	33.3	16	25.0
	1996-1997	17	28.3	20	31.3
	1998-1999	12	20.0	13	20.
Currently in School		5	8.33	8	12.5

[a] Awaiting M. Ed. result.

Level of education. All the graduates who participated in the study possessed a Diploma and a B. Ed. in Business Education. One Business Studies graduate and one Secretarial Studies graduate possessed a Masters degree in Education, and a second of the Business Studies graduate was awaiting her M. Ed. result at the time of this study.

Teaching experience. The Business Studies graduates and the Secretarial Studies graduates had a similar level of teaching experience. For example, 63.3% of the Business Studies graduates versus 64.1% of the Secretarial Studies graduates had one to five years teaching experience.

Employment status. All 124 Business Studies and Secretarial Studies graduates who participated in this study had full-time teaching employment in Jamaica. The type of schools where these graduates teach included secondary high, comprehensive high, technical high schools, and community colleges (see Table 5).

Nationality. All except one of the Business Studies graduates (98.3%) were Jamaicans. The one graduate came from the Island of St. Lucia. All the graduates in the Secretarial Studies group (100.0%) were Jamaicans.

Year of graduation. Only graduates from 1990 to 1999 were approached to participate in the study. This was because the earlier graduates had less knowledge about the present program given the changes made in the late 1980s. As shown in Table 15, between 1990 and 1995, 51.7% of the Business Studies graduates and 48.4% of the Secretarial Studies graduates completed their programs, while 48.3% of the Business Studies graduates and 51.6% of the Secretarial Studies graduates completed their program between 1996 and 1999.

Currently in school. As shown in Table 15, 8.3% of the Business Studies graduates and 12.5% of the Secretarial Studies graduates were pursing graduate programs in different institutions such as University of the West Indies (UWI), North Caribbean University, Mico's Teachers College, Caribbean Theology College, Institute of Management, Nova University, and Barry University off-shore programs.

Demographic Characteristics of Instructors

The demographic characteristics of instructors in the B. Ed. Business Education programs at UTECH are summarized in Table 16. As pointed out earlier, a total of 18 instructors in the B. Ed. Business Education programs participated in this study. Two of the instructors taught only Business courses; two taught only Secretarial courses; and 14 taught both Business and Secretarial courses.

Gender. As shown in Table 16, the vast majority of the instructors were females. Of the 18 instructors who participated in the study, only 5 (27.7%) were males and 13 (72.2%) were females.

Level of education. All of the 18 (100%) instructors possessed a Bachelors' degree. Two of the instructors with a Bachelors' degree were pursing a Masters degree. Fifteen (83.3%) of the instructors also possessed a Masters degree while two of the 15 instructors were pursing a doctorate degree. This finding did not reflect well the requirement that, to teach in the B. Ed. Programs, all instructors must possess a Masters degree.

Table 16

Demographic Characteristics of Instructors

Characteristics		Business n = 2	Secretarial n = 2	Combined Group n = 14
Gender	Male	1 (5.6)	0 (0.0)	4 (22.2)
	Female	1 (5.6)	2 (11.1)	10 (55.6)
Level of Education	Bachelors	0 (0.0)	1 (5.6)	2 (11.1)[a]
	Masters	2 (11.1)	1 (5.6)	12 (66.7)[b]
Teaching Experience	Diploma:			
	None	1 (5.6)	1 (5.6)	5 (27.8)
	1-5	1 (5.6)	1 (5.6)	6 (33.3)
	6-10	0 (0.0)	0 (0.0)	1(5.6)
	Above 10	0 (0.0)	0 (0.0)	2 (11.1)
	B. Ed.:			
	None	1 (5.6)	1 (5.6)	1 (5.6)
	1-5	1 (5.6)	1 (5.6)	11 (61.1)
	6-10	0 (0.0)	0 (0.0)	1 (5.6)
	Above 10	0 (0.0)	0 (0.0)	1 (5.6)
Employment Status	Part-time	1 (5.6)	1 (5.6)	7 (38.9)
	Full-time	1 (5.6)	1 (5.6)	7 (38.9)
Nationality	Jamaican	1 (5.6)	2 (11.1)	12 (66.7)
	Other	0 (0.0)	0 (0.0)	2 (11.1)

Note: Number in parentheses are percentages.

[a] One instructor pursing a Masters degree, and [b] Two instructors pursing Ph. D.

Teaching experience. Of the 18 instructors, 7 (38.9%) did have teaching experience in the Business Education Diploma programs, while 8 (44.4%) of the instructors had one to five years, and 3 (16.7%) had at least six years experience. In the B. Ed. Business Education programs, 3 instructors (16.7%) did not have any teaching experience, 13 (72.2%) had one to five years teaching experience, and only 2 (11.1%) had taught more than six years in the B. Ed. programs.

Employment status. Of the 18 instructors, 50.0% were employed full-time (all year) at UTECH, while 50.0% were employed part-time, that is, they worked only during the B. Ed. the summer program.

Nationality. Fifteen (88.3%) of the instructor were Jamaicans, while 2 (11.1%) of the instructors were non-Jamaicans (one Nigerian, the other from the Islands of St. Martin in the Caribbean).

In summary, the response rates for students' questionnaires were as follows: Module One Business Studies was 87.0% and Secretarial Studies was 100.0%. In Module Two Business Studies it was 80.0% while in Secretarial Studies it was 83.3%. It was 100.0% for both groups in Module Three. The response rates for graduates' questionnaires were as follows: 93.8% for the Business Studies group and 95.5% for the Secretarial Studies group. The response rate for instructors' questionnaires was 94.7%.

The response rates for the individual interviews with the senior administrative staff and senior academic staff were 83.3% and 100%, respectively. The response rates for students' focus group interviews were as follows: Module One Business Studies was 73.9% and Secretarial Studies was 80.0%. In Module Two Business Studies it was 80.0% while in Secretarial Studies it was 83.3%. In Module Three Business Studies, it was 87.5% and 90.0% for the Secretarial Studies group.

In the B. Ed. Business Studies programs there were more females than males in the three modules. The Secretarial Studies program for the three modules had all female students. For the graduates, 18.3% were males that graduated from the Business Studies program and 81.7% were females. The Secretarial Studies graduates were all females. There were 72.2% female instructors and 27.8% male instructors who participated in the study.

CHAPTER FIVE

CONTEXT EVALUATION RESULTS AND FINDINGS

The results and findings of the analyses of the students', graduates', instructors' and principals' responses to their questionnaires, of the student focus group discussion, and of the individual interviews conducted with senior administrative and academic staff, representatives of the Ministry of Education, and the official from the one granting agency are presented in this and the next three chapters. This chapter is concerned with the results and findings related to context evaluation, while the next three chapters are concerned with the results and findings related, respectively, to input, process, and product evaluation.

In all three chapters the statistical results reported in Table form are items means and standard deviations for individual items or, given an acceptable level of internal consistency (Cronbach's $\propto \geq 0.53$), for sets of items (see p. 66). The responding summary ANOVA Tables are presented in Appendix J in the order in which they are presented in the text.

The results and findings in each of the four chapters are organized in terms of the evaluation questions listed in Chapter One and which served to guide the conduct of the evaluation. Each section within each chapter begins with the evaluation question. This is then followed, generally, by a presentation and discussion of the results obtained from the students and graduates responses and, then, by a presentation and discussion of what was gleaned from the interviews of the administrative and academic staff, the ministry officials, and the granting agency official, and from the review of documents. For many of the evaluation questions, the interview data and findings from the document review were somewhat sparse, either because of non- response on the part of the person being interviewed or failure to either document or to document incompletely. The limitations will be identified as they arise in the presentation and discussion of results.

Context Evaluation

The set of evaluation questions presented in this section addressed the B. Ed. degree program mission statement, philosophy, objectives, and expected learning outcomes and how they served as guides for the implementation of the B. Ed. Business Studies and Secretarial Studies programs. The chapter concludes with a discussion of the students to be served by the B. Ed. Business Studies and Secretarial Studies programs.

Mission Statement of the B. Ed. Business Studies and Secretarial Studies Programs

Evaluation Question 1: What is the mission statement of the B. Ed. Business Studies and Secretarial Studies programs in UTECH and how well known is it to the stakeholders?

At the time of this study, the mission statement for the B. Ed. Business Studies and Secretarial Studies summer programs was:

> The Technical Teacher Education Department provides quality teachers in technical specializations by promoting academic excellence through skill mastery and competency development in critical areas of need. (University of Technology, Jamaica, B. Ed. Handbook, 1998-99, p. 1)

This statement is close to what different authors see as a mission statement (e.g., Falsey, 1989; Nicholas, 1991; Graham and Havlick, 1994). Falsey (1989), for example, defined a mission statement as a codified set of principles that guides a company's actions (in this case a faculty) and which is used as a yardstick by which a company is measured (provision of quality teachers with technical specialization). Falsey further stated that a mission statement says two things about a company: who it is (in this case the

Department of Technical Teacher Education) and what it does (promoting quality, academic excellence, mastery, and competency). Thus, except for the incorrect identification of the Faculty of Education and Liberal Studies as the Department of Technical Teacher Education, the mission statement is like that of other mission statements typically found in education institutions.

Graham and Havlick (1994) pointed out that a "mission statement should spring from values and beliefs already at work in an organization" (p. 4). However, this could not be assessed in the present study since no record of who was involved in formulating the mission statement and what discussion took place in its formulation was found in the documentation maintained by the UTECH central office or by the Faculty of Education and Liberal Studies.

To be influential and effective in guiding a faculty in the development of programs and instructional process, the mission statement should be known to the relevant stakeholders. This appears not to be the case in the present situation. While the mission statement is printed in the student handbook, the administrative staff and officials of the funding agencies and the students in the focus groups indicated that they were not aware of the mission statement of the B. Ed. programs. Therefore, it is recommended that *the program administrators of the B. Ed. Business Studies and Secretarial Studies programs consider (a) revising the statement so that it correctly identifies the Department as the Faculty of Education and Liberal Studies and not as the Department of Technical Teacher Education, and (b) developing ways to ensure that the mission statement becomes better known by all the relevant stakeholders.* By adopting this recommendation, the mission statement will first be more correct, and second, more influential and effective in guiding the faculty in the development of programs and instructional process at UTECH.

Philosophy of the B. Ed. Business Studies and Secretarial Studies Programs

Evaluation Question 2: What is the philosophy of the B. Ed. Business Studies and Secretarial Studies programs?

According to Oliva (1997), "a school's philosophy should always be the result of cooperative efforts by teachers and administrators and preferably with the additional help of parents and students" (p. 191). This provides everyone with the opportunity to be involved and also to gain consensus (Oliva, 1997). Further, Oliva provided the following example to illustrate what he considered to be an example of an appropriate school philosophy:

> Miami Palmetto Senior High School provides opportunities for all students to become mature, thinking, skilled young people, well equipped for education, career, personal, and life-long growth. The staff seeks to create an atmosphere conducive to the learning process and one which enables students to develop a positive self-image. These factors combine to enable students to develop as responsible citizens. (Oliva, 1997, p. 250)

It should be noted that Oliva's example is for a high school. However, this example is presented to provide a frame of reference to assess the stated philosophy of the B. Ed. Business Studies and Secretarial Studies programs at UTECH.

The philosophy governing the B. Ed. degree programs offered at UTECH is:

> The Bachelor of Education degree program is designed for teachers of technical subjects who desire post-diploma qualifications. It will provide the teachers with opportunities to develop research and administrative skills in relation to his/her area of specification while extending interpersonal, technical and teaching skills. This philosophy is predicated on the dynamic need for continuous professional growth. (University of Technology, Jamaica, B. Ed. Handbook, 1998-99, p. 2)

What is stated here appears to be the case, although it might be beneficial to replace the first word of the second sentence in the philosophy with "the staff" (Oliva, 1997, p. 250) to emphasize the fact that the staff at UTECH have a central role in providing the students with what is needed and desired. Notwithstanding this suggestion, the mission statement and philosophy together define the students to be served, what knowledge and skills are to be acquired, and the level of performance expected of the students. Further, they reflect an emphasis upon continuous lifelong learning which is necessary for the rapidly changing world in which the students will work. To be effective, the school philosophy together with the mission statement should provide direction, albeit general, to guide the further development of more specific goals and objectives.

The former President of UTECH indicated that the mission statement, philosophy, and objectives of the B. Ed. Business Studies and Secretarial Studies programs in UTECH were formulated by a team of individuals headed by the then Head of the Department of Technical Education. This perception was checked with the other administrative and academic staff at UTECH, who continually referred to program documents. However, except for the mission statement, nothing else was found related to the mission statement or the statement of philosophy. No document was found to identify the members of this team, and what discussions took place. Thus, it is not known to what extent the program administrators, instructors, students, and representatives of future employers were involved in the development of the statement of philosophy. Notwithstanding this concern, the philosophy and mission statement provide direction and appear to be congruent with each other.

Objectives of the B. Ed. Business Studies and Secretarial Studies Programs

Evaluation Question 3: What are the objectives of the B. Ed. Business Studies and Secretarial Studies programs?

There are no specific objectives for the B. Ed. Business Studies and Secretarial Studies programs. Instead, a general set of objectives is provided for all B. Ed. degree programs offered by the Faculty Education and Liberal Studies (see Figure 1, Chapter Two).

Initially, when the B. Ed. Business Studies and Secretarial Studies programs in UTECH began, there were eight B. Ed. program objectives (B. Ed. Handbook, 1986, p.18). Later, as the B. Ed. programs expanded, these eight objectives were reformulated as six program objectives. No official record was found to ascertain the date of the reformulation and who was involved in the revision. The six program objectives include:

To provide:

1. A baccalaureate program to assist teachers of Business and Secretarial studies, Home Economics, and Industrial and General Technology in upgrading their general, professional and technical skills.
2. Training for technical teachers which will assist them in understanding features of the Caribbean environment significant to their area of specialization.
3. The teacher with skills in curriculum planing, development and evaluation.
4. Added leadership and administrative skills in organizing and supervising specialist technical programs.
5. Opportunities for broadening the teachers' general knowledge to make them more informed and competent professionals.
6. Training that will enable teachers to plan, conduct and interpret educational and technological research. (University of Technology, Jamaica, B. Ed. Handbook, 1998-1999, p. 3)

Objectives one, three, four, and six appear to fit well with the mission statement and philosophy for the Business Studies and Secretarial Studies degree programs, while objective two and, perhaps, objective five fit less well. In the case of objective two, no reference is made in either the mission statement or the statement of philosophy to the Caribbean environment. Objective five is quite general. As such, it does not elaborate what knowledge and skills should be learned or acquired beyond that which is provided in the mission and philosophy statements. However, it should be noted that this concern is addressed by the statement of expected learning outcomes discussed below.

The acceptability of six program objectives stated in the B. Ed. Handbook for 1998-1999 session could not be checked with the administrative and academic staff, and the students. These people indicated they were not fully aware of the objectives. They, therefore, were unwilling to comment on them. If the regular intent is to serve the Caribbean region as indicated in the second objective, then it is recommended that *(a) the mission statement and/or philosophy be revised to reflect the intent to serve and influence the Caribbean region and not Jamaica. Otherwise, reference to the Caribbean region should be removed from the program objectives and expected learning outcomes. And (b) Objective five should be revised by "sharpening" what is meant by general knowledge so that this objective is clarified and not open to misinterpretation.*

Expected Student Outcomes of the B. Ed. Business and Secretarial Studies Programs

Evaluation Question 4: What are the expected student outcomes of the B. Ed. Business Studies and Secretarial Studies programs?

Another way to identify the objectives of a degree program is to look at statements which reflect the expected student outcomes. There are ten expected student outcomes listed in the B. Ed. Handbook (1986). At the end of the program it is expected that students will:

1. Have understood and thus be better able to implement the national goals of development and education as they relate to economic development;
2. Have gained comprehensive knowledge of the character, structure and functions of Business within the Caribbean;
3. Have developed skills necessary to cope with change;
4. Have developed planning, organizing and supervisory skills for educational administrative purposes;
5. Have acquired and developed skills in interpersonal relations;
6. Have developed an awareness of articulation between Government and other agencies as they relate to Business Education;
7. Have developed instructional materials relevant to Business Education in the Caribbean ;
8. Be able to relate Business Education to the total education process;
9. Be able to implement and manage a productive work program in an educational institution; and
10. Have developed further skills in curriculum design for Business Education. (B. Ed. Handbook, 1986, p. 19)

The expected learning outcomes reveal quite clearly what knowledge and behaviors the students are expected to learn and acquire. The B. Ed. Business Education programs at UTECH are expected to enhance the abilities of these students to teach by adding to the knowledge and skills they possess.

Philosophy and Program Objectives as Effective Guides

Evaluation Question 5: Do the program objectives, the expected learning outcomes, and the philosophy serve as effective guides for the present and future implementation of the B. Ed. Business Studies and Secretarial Studies programs?

The former President of UTECH expressed that the philosophy and program objectives gave direction to the development of the B. Ed. Business Education programs in UTECH. This claim was supported by Dean of the Faculty of Education and Liberal Studies. She stated that "the philosophy and objectives of the B. Ed. program serve as an effective guide to the implementation of the programs at UTECH." The Dean further stated that "the program has been able to provide teachers with the opportunities to up-grade their qualifications through the development of administrative, research and teaching skills, which is what the philosophy and objectives of the B. Ed. programs stand for." However, when this perception was checked with the other administrative and academic staff, they were unwilling to comment on it.

As previously mentioned with the exception of objective two and, perhaps, objective five, there is a good fit between the mission statement, statement of philosophy, the present set of objectives, and the expected learning outcomes. Lastly, there is a good fit between the objectives of the B. Ed. programs in general and the expected learning outcomes for the B. Ed. Business Studies and Secretarial Studies programs. A question that needs to be addressed is "Does UTECH, through the B. Ed. Business Studies and Secretarial Studies programs, intend to serve the Caribbean region?" The enrolment data presented in the previous chapter revealed that all but four students presently in the programs were from outside Jamaica.

Persons to be served by the B. Ed. Business Studies and Secretarial Studies Programs

Evaluation Question 6: Who are the students to be served by the B. Ed. Business Studies and Secretarial Studies programs?

Another way to examine the intent of the program is to look at the students for whom the program is intended. The B. Ed. Business Studies and Secretarial Studies programs were initially and still are intended to serve teachers who had earlier completed the CAST/UTECH Teacher Diploma in Business Education or a Business Education Diploma in another teacher training college in Jamaica or in the Caribbean region (B. Ed. Handbook, 1986). The two programs were/are also intended for supervisors in the Ministry of Education who needed to up-grade their qualifications in order to better assist the Ministry of Education in the development, implementation, and supervision of Business Education programs in the high schools (B. Ed. Handbook, 1986).

As reported earlier in Table 14, 100% of the current students have diplomas. The B. Ed. Program Coordinator indicated that the program is actually serving those persons who wish to up-grade their qualifications in either Business Studies or Secretarial Studies and apply them in a related setting. This statement is confirmed by the results of the review of program documents, which showed the destination of graduates for 1998 as follows: teaching in Jamaica (70.0%), working with the Ministry of Education in Jamaica (2.4%), working with the private section (15.5%), teaching outside Jamaica (12.0%), or in another occupation (2.1%). This appears that the B. Ed. Business Studies and Secretarial Studies programs are serving the students for which the programs are intended.

CHAPTER SIX

INPUT EVALUATION RESULTS AND FINDINGS

Given the objectives and expected learning outcomes identified in the previous section, the next series of evaluation questions addressed what UTECH used or implemented to achieve these objectives. The governance and administrative structure, curriculum, number and qualifications of the faculty, resources provided, and student entry requirements were examined.

Governance and Administrative Structure

Evaluation Question 7: How effective is the governance and administrative structure of the B. Ed. Business Studies and Secretarial Studies programs?

The governance and administrative structure for the B. Ed. summer programs in Business Studies and Secretarial Studies is displayed in Figure 5. As shown, there are five levels beginning at the top with the University Council and ending with the Division Heads. This structure is not unlike that found at large North American universities. The composition and role of each of these levels are described below.

The University Council

After the institution was opened in 1958, a College Scheme was incorporated under the Education Act and the Code of Regulations a year later by an Act of Parliament. This Scheme required the establishment of a bicameral system of governance through the establishment of two bodies: the University Council and the Academic Board (Strategic Plan for the Polytechnic University of Jamaica, 1995-1998). The University Council has the "legal responsibility for all University appointments and promotions,

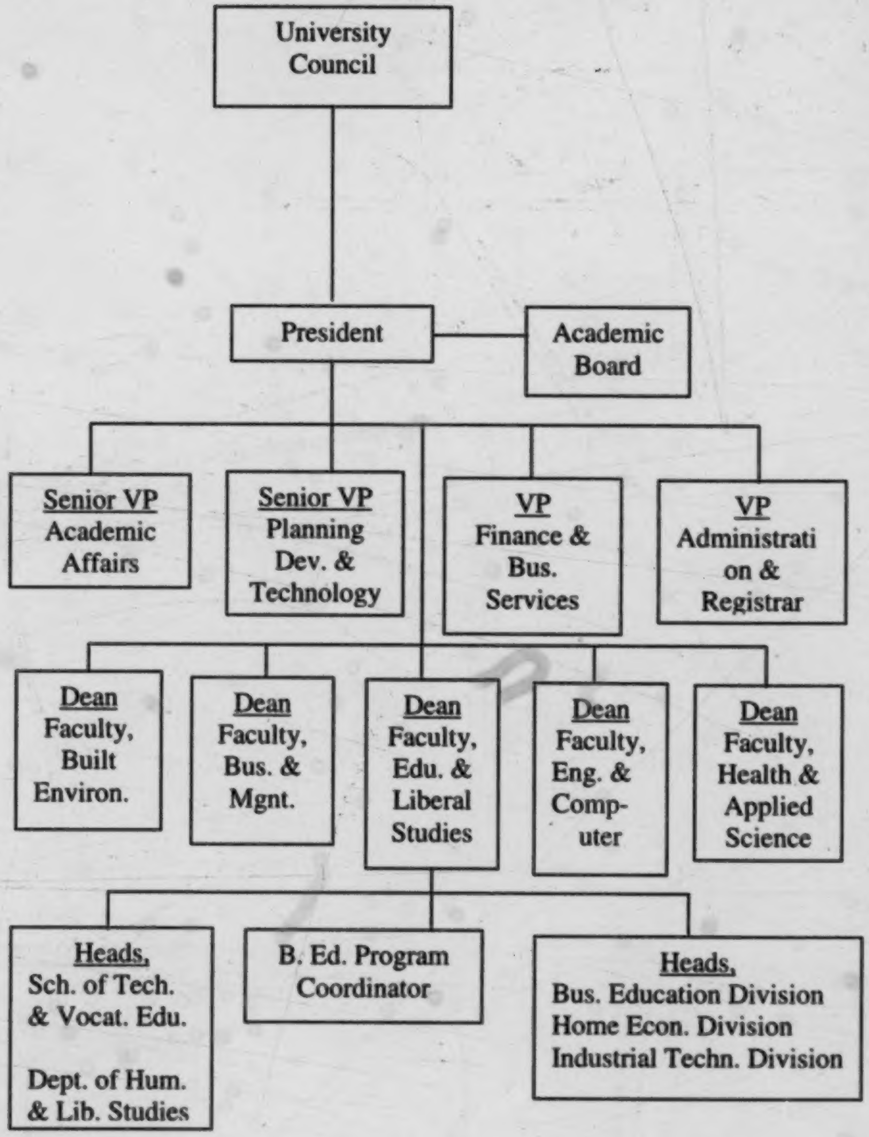
University Council
President
Academic Board
Senior VP Academic Affairs
Senior VP Planning Dev. & Technology
VP Finance & Bus. Services
VP Administrati on & Registrar
Dean Faculty, Built Environ.
Dean Faculty, Bus. & Mgnt.
Dean Faculty, Edu. & Liberal Studies
Dean Faculty, Eng. & Comp- uter
Dean Faculty, Health & Applied Science
Heads, Sch. of Tech. & Vocat. Edu.
Dept. of Hum. & Lib. Studies
B. Ed. Program Coordinator
Heads, Bus. Education Division Home Econ. Division Industrial Techn. Division

Figure 5. Governance and Administrative Structure of the B. Ed. Programs.

resources (financial, material and physical), and for the maintenance of standards within the University" (UTECH Student Handbook, 1998-99, p. 7). However, it should be noted that the appointment of part-time instructors is made at the faculty level.

The University Council has 24 members. Thirteen members are from the UTECH University community; the remaining eleven are from outside UTECH.

The Scheme specifies that the Chair of the University Council will be known as the Pro-Chancellor. Appointed by the Minister of Education, the duties of the Pro-Chancellor include performing all the duties of the University Chancellor in the Chancellor's absence except the conferring of awards and other academic distinctions. The Chancellor is also a member of the Council.

The 13 university members include the University President, the four UTECH Vice-Presidents [Senior Vice-President (Academic Affairs); Senior Vice-President (Planning Development and Technology); Vice-President (Administration and Registrar); Vice-President (Finance and Business Services)], and the UTECH Registrar who serves as the Secretary to the Council. The remaining seven members include a representative of the five Deans, appointed by the Deans; a representative of the Principal lecturers, appointed by the Principal lecturers; the President of the UTECH Academic Staff Union, elected by the Academic Staff Union; the President of Administration and Support Staff Association, elected by the Administration and Support Staff Association; the President of UTECH Students' Union, elected by the students; the President of UTECH Alumni Association, elected by the Alumni Association; and a representative of UTECH Auxiliary Staff Association, appointed by the Auxiliary Staff Association.

The eleven non-university members of the Council are appointed by the Minister of Education. These members include two officers from the Ministry of Education nominated by the Minister of Education; a Prime Minister's nominee; a senior academic staff member from the University of the West Indies, nominated by the Minister of Education; a representative of the Professional Association of Jamaica, a representative of the private sector of Jamaica, nominated by UTECH President; and three persons nominated by the University Council, who will not be employees or students of UTECH.

The term of office for the members of the University Council is three years, with the exception of UTECH President, whose term of contract is for 10 years, and the four Vice-Presidents, whose terms of office do not exceed five years (Strategic Plan for the Polytechnic University of Jamaica, 1995-1998). The remaining members of the Council are eligible for re-nomination or reappointment for not more than two times.

According to the Registrar, the University Council meets every month. When asked about the attendance at meetings, she indicated that "due to the conscientious commitment of the members, the attendance level was 100%." However, due to the need to maintain confidentiality, the evaluator was not able to obtain further information about the activities of the Council and how it operated.

Academic Board. The function of the Academic Board is to advise the Council on all academic matters. These matters include determining the criteria for the admission of students to the various programs offered at UTECH; establishing procedures for the development and subsequent approval of courses of study; promoting and regulating research; regulating the conduct of examinations and the appointment of internal and external examiners; granting degrees; and determining functions of members of the academic staff (The University of Technology, Jamaica ACT, 1999).

The Academic Board has 24 members. The membership includes the President, the four Vice-Presidents, the Director of Curriculum Planning and Evaluation, the Director of Graduate Studies and Research, the Deans of the five faculties, the University Librarian, the Heads of Schools, the Heads of Departments in the five faculties, and the President of the Students' Union. Membership on the Academic Board is automatic for the President, the Vice-Presidents, the University Librarian, the Deans, and the President of the Students' Union who are referred to as "ex officio members" (The University of Technology, Jamaica ACT, 1999, p. 31). The Director of Curriculum Planning and Evaluation and the Director of Graduate Studies and Research are nominated by the President and they are referred to as "nominated members" (The University of Technology, Jamaica ACT, 1999, p. 31). The Heads of Schools and the Heads of Departments are referred to as "elected members" because they are "elected by the professors of the university" (The University of Technology, Jamaica ACT, 1999, p. 31). At the time of this evaluation, there were three professors at UTECH.

The terms of office for the President, Vice-Presidents, University Librarian, and the Deans depend on their term of contract. The term of office for the nominated and elected members is four years, while the term of office for the President of the Students' Union is one year.

President. The President is the Chief Executive Officer of UTECH and the chairman of the Academic Board. The President is "responsible to the Council for the organization and operation of the institution and is assisted by the Vice-President(s), Faculty Deans and the Registrar, who serves as the Secretary to the Council" (UTECH Student Handbook, 1998-99, p. 8).

Vice-Presidents. As indicated before, the University has four Vice-Presidents. The Vice-President (Academic Affairs) is also a Senior Vice-President, since this person is responsible for all academic matters. Consequently, the Business Studies and Secretarial Studies programs are within this envelope.

Deans. UTECH has five Faculties: Built Environment, Business and Management, Health and Applied Science, Engineering and Computer Science, and Education and Liberal Studies. Each faculty is led by a Dean appointed by the University Council. Each faculty has a Board, which consists of the President, the four Vice-Presidents, the University Librarian, the Dean of the Faculty, one member of the academic staff, a student appointed by the Students' Union, and one person nominated by the Alumni Association (The University of Technology, Jamaica ACT 1999). Each Faculty Board advises and reports to the Academic Board through the Dean on all matters relating to the organization of teaching (for example, curriculum and examinations) and research in the discipline areas within the Faculty (The University of Technology, Jamaica ACT, 1999).

As members of the Academic Board, the Deans are "responsible to the President and the Academic Board for the administration and academic affairs of the faculty" (UTECH Student Handbook, 1998-99, p. 8). In the case of the Faculty of Education and Liberal Studies, the Dean is responsible for the overall supervision and administration of the B. Ed. degree programs (B. Ed. Handbook, 1986). In addition, the Dean is responsible for setting up the Advisory Committee which "guides and advises the Faculty on all matters concerning the content, quality and overall acceptability of the degree programs" (B. Ed. Handbook, 1986, p. 29).

Since the Business Studies and Secretarial Studies Programs are located within the Faculty of Education and Liberal Studies, the balance of the governance and administrative structure presented below is limited to this faculty.

Heads, School of Technical and Vocational Education and Department of Humanities and Liberal Studies. Within the Faculty of Education and Liberal Studies, there is a School of Technical and Vocational Education and a Department of Humanities and Liberal Studies. The Head of School of Technical and Vocational Education oversees the implementation of all degree and diploma programs in Business Education, Home Economics, and Industrial Technology (UTECH, Prospectus 1997-99). In addition, the Head is in charge of the Division of Vocational Education. This Division offers a Masters degree program in Work Force Education and diploma and certificate programs in vocational education.

The Head of the Department of Humanities and Liberal Studies is responsible for the Communications Division and the Humanities and Social Sciences Division (UTECH, Prospectus 1997-99). This Department provides what are essentially service courses to programs across the university.

B. Ed. Program Coordinator. The B. Ed. Program Coordinator is responsible for the management of the B. Ed. Summer degree programs, including course development, implementation, and examination and evaluation of courses (B. Ed. Handbook, 1986). Initially, the position was filled on a part-time basis by one of the regular full-time instructors. In 1997, a full-time B. Ed. Program Coordinator was appointed.

Division Heads. In the Faculty of Education and Liberal Studies, there are three Divisions: Business Education, Home Economics, and Technology. In the case of Business Education Division, the head is responsible for liaison with staff and students in the B. Ed. Business Studies and Secretarial Studies programs as well as the Business Education Diploma programs on matters related to the programs and courses (for example, curriculum and examinations) and advising students in the program (B. Ed. Handbook, 1986).

This evaluation was not designed to evaluate the organizational structure and processes at UTECH. What was of interest was the influence of this structure and the accompanying processes upon the operation of the B. Ed. Business Studies and Secretarial Studies programs.

The B. Ed. Program Coordinator[1] described the administrative style as complex, slow in responding to the demands of the students, and resistant to change. In addition she expressed the need for standard rules and policies within the organization. The students who took part in the focus group discussions echoed these same concerns. For example, 72.7% of Module Three students who took part in the focus group discussions indicated that they had experienced delays in decisions to be made by the B. Ed. degree program administrators due to what they perceived to be the complex, hierarchical administrative structure at UTECH. However, despite these delays in decisions, the students commented that, when rendered, the decisions made were effective and acceptable.

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[1] The senior administrators who were interviewed were asked similar questions. However, they were unwilling to respond.

It appears that the governance and administrative structure of programs is not particularly efficient for the B. Ed. Business Studies and Secretarial Studies programs. The nature of these two programs is different from other programs offered at UTECH. For example, in contrast to other programs, the Business Studies and Secretarial Studies are part-time programs. Students are on the UTECH campus only during the summer. Further, a part of these programs is offered during the fall/winter through a series of one-day seminars and five-week work experiences in a non-university location. Further, the B. Ed. students hold regular, full-time work. In light of these differences, the governance structure and decision processes used for the regular program may not be appropriate for these part-time programs. It may be that more responsibility and authority should be granted to the program administrators closer to the "action" of these two programs. Therefore, it is recommended that *attention be given to the administrative structure of the B. Ed. summer degree programs at UTECH with intent of making it more responsive to the special needs of the students who attend these programs.* For example, to reduce delays being experienced in decision making due to what the students perceived to be the complex, hierarchical administrative structure at UTECH, the B. Ed. degree program administrators could be given more power to make decisions pertaining to the B. Ed. degree programs.

Match between Intended and Actual Curricula

Evaluation Question 8: What are the intended and actual curricula for the B. Ed. Business Studies and Secretarial Studies programs and to what degree are they congruent?

In this section, the intended curriculum of the B. Ed. Business Studies and the Secretarial Studies programs are first described. This is followed by a description of the actual curriculum and how it differs from the intended curriculum for each program.

Intended Curriculum

To meet the objectives and address the expected learning outcomes for the B. Ed. Business Studies and Secretarial Studies programs, a program proposal was prepared in 1979 by local team. As described in Chapter 2, this team was assisted by a representative of the Canadian Teachers' Federation and a senior Education Officer for Business Education in the Ministry of Education (B. Ed. Self-Study, 1986). The document produced by the team outlined the structure, content, and staffing of the proposed degree program. In general terms, the program consisted of three modules with two components: a summer component followed by a fall/winter component. The proposed total number of hours for both programs was 672 hours.

In January 1982, the CAST Technical Teacher Education Department was created and an Advisory Committee was established to work out the details of the program outlined by the local team. The Advisory Committee consisted of 12 members: the Principal of CAST (the former name of UTECH) as the chairman, the Head of Technical Teacher Education Department, one instructor from the Technical Teacher Education Department, a student representative, two lecturers from the University of the West Indies, three high school principals, and one assistant Chief Education Officer. Subsequently, in February 1982, CAST contracted three consultants from universities in the United States to review the proposed curriculum (B. Ed. Self-Study, 1986).

The consultants and the Advisory Committee agreed with the first Committee that the curriculum should be structured as an addition to the existing three-year full-time Diploma in Business Education. However, the consultants felt that "the amount of course-work and number of course hours required for the post-diploma phase of the proposed degree programs [cf, Table 9] were substantially beyond what would be required for any Bachelor's degree program in the United States" (B. Ed. Self-Study, 1986, p. 1). The consultants then made the following suggestions:

> 1. Reduce, if not eliminate, all the methods type courses being proposed in the latter part of the program;
> 2. Eliminate technical skill aspects such as shorthand, transcription, typewriting, etc.;
> 3. Reconfigure the options and the core curriculum so that courses such as Business Law would be included in the core;
> 4. Reduce some of the material covered in Curriculum Development;
> 5. Expand the Educational (School) Administration course to include supervision;
> 6. Establish a course entitled "Small Business Entrepreneurship and Economic Development", and include within it the proposed Designing, Implementing and Managing Productive Program course; and
> 7. In the two options, eliminate the methodology courses, the extensive course in Cost Accounting for the Business option people, and the methodology and Shorthand, Transcription, Typewriting courses for Secretarial options. (B. Ed. Self-Study, 1986, p. 5)

With respect to the fall/winter activities, the consultants recommended that the number of seminars to be held after each module be reduced from ten to a more reasonable number, and that the two independent study projects be reduced to one during the course of the three-year program (B. Ed. Self-Study, 1986). They further recommended that the amount of coursework and the number of hours required for the B. Ed. should be comparable with Bachelor's degree programs in the United States (B. Ed. Self-Study, 1986).

With the assistance of the consultants, the proposed structure and curriculum were revised to become the intended curriculum. This curriculum consisted of three modules to be offered across three consecutive summers and fall/winter terms.

Each module is described below. The intended and actual curricula are summarized in Tables 17, 18, and 19 for each of the modules. The intended curriculum for Modules One to Three is discussed in the balance of this subsection. A comparison of the intended and actual curricula for the three modules follows in the second subsection.

Module One. The Module One summer component involved studying on the UTECH campus during the first summer session. During this period four required courses were to be offered: Communication Skills, Data Processing 1, Curriculum Development, and Business Law (see Table 17). Students were required to complete all four required courses; no optional courses were to be provided. The second component consisted of a series of six seminars. The purpose of the seminars was to ensure continuity of the program between the modules offered in successive summers. These six seminars were to be offered in the fall/winter term, in the months of October, November, January, February, March, and April. Each seminar was designed to last for one and half days, from Friday, 8 a.m. to 4 p.m. and from Saturday, 8 a.m. to 1 p.m. The duration of each seminar was to be 12 hours, with the exception of "Presentation of instructional aids and materials", which was to be 24 hours.

Table 17
Intended and Actual Module One B. Ed. Business Studies and Secretarial Studies Curricula

Intended Curriculum			Actual Curriculum		
Business Studies & Secretarial Studies			Business Studies & Secretarial Studies		
Course	Course Hour	Credit	Course	Course Hour	Credit
Com. Skills	4	2	Com. Skills	24	2
Data Pro. 1	60	2	Data Pro.1	36	2
Curri. Dev.	36	2	Research 1	24	2
Bus. Law	48	2	Bus. Law	36	2
			Small Bus. 1	24	2
One and Half Day Seminars			One Day Seminar		
Instrut. Aids	24	2	Research	6	1
Com. Skills	12	1	Com. Skills	6	1
Interaction with Bus.	12	1	Data Processing	6	1
Principles & Problems	12	1	Office Education	6	1
Cooperative Work Exper.	12	1	-	-	-
Office Education	12	1	-	-	-
Total	232	15	Total	168	14

Module Two. The Module Two summer component, offered in the second summer on campus, contained four required core courses and two optional courses (see Table 18). The core courses were Data Processing 2, School Administration, Research Methods, and Small Business 1. In the case of Business Studies, students were to be offered Caribbean Economy, Growth and Development as a specialist option course, while in Secretarial Studies, students were to be offered Word Information Processing 1.

Business Studies students and Secretarial Studies students were required to complete 230 course hours.

Following the Module Two summer component, the students were expected to attend five seminars, which were to be offered in October, November, January, February, and March. Each seminar was designed to last for one and half days, on Friday, 8 a.m. to 4 p.m. and on Saturday, 8 a.m. to 1 p.m. The duration of each seminar was to be 12 hours, with the exception of "Career Guidance" which was to be 36 hours.

The second module included a second activity in the second component. In addition to attending the seminars, the students were to complete two 6-week work experience sessions in a non-school setting (B. Ed. Handbook, 1986). The aim of these work experiences was to allow students to practice the practical aspects of the Business Studies Education curriculum in two different settings. In the case of Business Studies, the students were to be working in offices where they were required to do tasks related to "clerking, accounting, sales, marketing, and project development" (B. Ed. Handbook, 1986, p. 27). Secretarial students were expected to work as secretaries where they would perform tasks such as typewriting and shorthand skills.

Table 18

Intended and Actual Module Two B. Ed. Business Studies and Secretarial Studies Curricula

Intended Curriculum			Actual Curriculum		
Business Studies			Business Studies		
Course	Course Hour	Credit	Course	Course Hour	Credit
School Admin.	26	2	Educational Admin.	24	2
Research Methods	36	2	Research Methods 2	24	2
Data Proc. 2	24	2	Data Proc. 2	36	2
Small Bus.	24	2	Small Bus. 2	36	2
Specialist Option			Specialist Option		
Carib. Econ.	24	2	Fin. Acct. 1	24	2
One and Half Day Seminars			One Day Seminar		
Career Guidance	36	2	Career Guidance	6	1
Com. Skills	12	1	-	-	-
Interaction with Bus.	12	1	-	-	-
Principles & Problems	12	1	-	-	-
Issues in Sci. & Techno.	12	1	-	-	-
Office Educ.	12	1	-	-	-
Total	230	17	Total	150	11
Secretarial Studies			Secretarial Studies		
Course	Course Hour	Credit	Course	Course Hour	Credit
(As above)	110	8	(As above)	120	8
Specialist Option			Specialist Option		
Word Process. 1	24	2	Word Process. 1	24	2
One and Half Day Seminars			One Day Seminar		
(As above)	96	7	(As above)	6	1
Work Exper.	-	-	Work Exper.	-	-
Total	230	17	Total	150	11

Module Three. During the third summer session, three required core courses and two specialist option courses were to be offered (see Table 19). The core courses were Educational Measurement, Human Relations, and Small Business 2. In the case of Business Studies students were to be offered Financial Accounting as a specialist option

Table 19
Intended and Actual Module Three B. Ed. Business Studies and Secretarial Studies Curricula

Intended Curriculum			Actual Curriculum		
Business Studies			Business Studies		
Course	Course Hour	Credit	Course	Course Hour	Credit
Educational Measure.	24	2	Educational Measure.	24	2
Human Relations	36	2	Human Relations	36	2
Small Business 2	24	2	Curriculum Develop.	24	2
Specialist Option			Specialist Option		
Fin. Acct.	48	2	Fin. Acct. 2	30	2
			Carib. Econ.	24	2
Research Project	-	-	Research Project	-	-
Total	132	8	Total	138	10
Secretarial Studies			Secretarial Studies		
Course	Course Hour	Credit	Course	Course Hour	Credit
(As Above)	84	6	(As Above)	84	6
Specialist Option			Specialist Option		
Word Processing 2	24	2	Word Processing 2	24	2
Research Project	-	-	Research Project	-	-
Total	108	8	Total	132	8

course, while in Secretarial Studies, students were to be offered Word Information Processing 2. Business Studies students were required to complete 132 course hours, while the Secretarial Studies students were required to complete 108 course hours.

No seminars were to be offered to the Business Studies and Secretarial Studies students in Module Three. Instead, the students were expected to complete a research project by the end of November of that year. The research project was intended to be a practical application of what the students had learned in all of their courses.

Actual Curriculum and Comparison with the Intended Curriculum

Since 1986, the intended curriculum has been revised once. Unfortunately, no records were found to ascertain when the curriculum was revised, the reasons for the revision, and who was involved in making the revisions. This revised curriculum is now the present curriculum.

Module One. Students must now complete five required courses in Module One, which is one more than initially intended in the first summer component (see Table 18). Communication Skills, Data Processing 1, and Business Law were retained from the intended curriculum. The Curriculum Development course was dropped, while Research Methods 1 and Small Business 1 courses were added. Further, the number of required course hours was reduced from 232 to 168 hours. As intended, no option courses are offered.

Following the completion of the summer component of Module One, students now attend four one-day seminars instead of the initially planned six. While the purpose of the seminars was retained, four seminars were dropped and two were added (see Table

17). The January and April times were dropped, and the seminars are held only on Friday from 8 a.m. to 4 p.m., and not on Friday and Saturday as initially intended.

Module Two. There is no change in the number and type of courses required in Module Two (see Table 18). However, the title of the course School Administration in the intended curriculum was changed to Educational Administration. For both programs, the students take a common set of four core courses and one specialist course specific to their area of study. However, as with Module One, the number of course hours was reduced from 230 hours to 150 hours for both Business Studies students and Secretarial Studies students.

During the fall/winter term, the students now attend only one seminar instead of five as initially planned. Further, this seminar is offered on Friday during any of the following months: October, November, January, and February instead of on Friday and Saturday. The purpose of the work experience component to be completed between the second and third summers has been retained, but with a reduction in weeks from 12 to 10, again split in two equal halves.

Module Three. Like Module Two, the number of courses now offered is the same as the number intended. However, the types of courses offered are different (see Table 19). For example, while the Educational Measurement and Human Relation courses have been retained, Small Business has been replaced by Curriculum Development as a required course. The specialist option courses for Business Studies were also changed: Business Studies students now take Financial Accounting 1 and Caribbean Economy instead of Financial Accounting. In the case of Secretarial Studies, Word Processing 2 is retained. Further, the number of hours was increased from 132 to 138 for Business

Studies students and from 108 to 132 for Secretarial Studies. As in the intended curriculum, no seminars are offered following Module Three, and the students must complete a research project before the end of November of each year.

The basic framework of the intended and actual curricula are essentially the same, with some changes in the curriculum and a reduction in the number of course hours. While there were name changes for some of the courses, examination of the course outlines did not reveal any change in content. While the increase in hours appears to be a reasonable change, the students and instructors indicated that the length of the summer component, seven weeks, is insufficient to accommodate the number of course hours and allow sufficient time for homework and studying. Therefore, *to provide more time, consideration should be given to increasing the number of weeks in each summer component or, perhaps, adding a fourth summer component, with the existing courses distributed across the four summers.*

The intended and actual program structure and curricula were designed to meet the needs of teachers with a teaching diploma and who preferred a part-time program as a means of up-grading their qualifications. The idea of organizing seminars during the academic year to ensure continuity of the program between the summer programs is a problem, however. According to the officer in charge of overseas student affairs, overseas students are not able to benefit from the seminars since they can not attend them due to high costs and the distances they must travel. Further, the B. Ed. Program Coordinator indicated that local students who had full-time teaching jobs found it difficult to attend the Friday seminars. As a result of this, the attendance for the seminars was not satisfactory.

According to the B. Ed. Program Coordinator, the research project in both programs is good, although she indicated that finding the right supervisors for each student was a problem. The assignment process begins with the assessment of the students' research proposals by the B. Ed. Program Coordinator. Based on the assessment, supervisors are matched to the students, so that each supervisor is supervising a student with a research project for which the supervisor has the knowledge base and expertise and/or an interest in the research project. The supervisors may be one of the instructors or a person external to the program but with the needed expertise. Once the research project is completed, it is assessed by people selected by the B. Ed. Program Coordinator who have the expertise needed.

Despite this, a review of the students' records revealed that 32.2% of the Business Studies students and 28.3% of the Secretarial Studies students have not graduated from the program because they had not yet completed their research projects[2]. Three out of four graduates who responded to the graduate survey indicated that they did not receive adequate supervision from the supervisors assigned to them, and thus, they perceived the research project experience as "very bad." A similar situation was found in the B. Ed. Self-Study conducted in 1986: "students have persistently complained about the stressfulness of this phase of the program and from time to time requested a research alternative" (p. 10). Therefore, it is recommended that *(a) the B. Ed. program administrators conduct an attrition study (Bower & Myers, 1976) to determine the exact number and percentage of students who left the program and their reasons for leaving,*

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[2] These figures are estimates, not true values.

and (b) there is a need to review the supervision of the research project in order to determine the best way to assist students in completing their projects and the program.

Match between Expected Student Outcomes and Contents of Actual Curriculum

To further assess the match between the actual curriculum and the objectives, the course contents in the present program were matched against the expected student outcomes. A summary of the match between the expected student outcomes and the courses in the actual curriculum is provided in Table 20.

Table 20
Match between Expected Student Outcomes and Content of Actual Curriculum

Expected Student Outcome	Content of Actual Curriculum
1 & 10	Curriculum Development
2	Small Business 1 & 2, & Financial Accounting 1 & 2
3	Research Methods 1 & 2, Work Experience, Word Information Processing 1 & 2, & Data Processing 1 & 2
4 & 9	Educational Administration, & Communication Skills
5	Human Relations, & Communication Skills
6	Business Law, & Seminar
7	-
8	Work Experience, & Business Law

Expected outcomes one and ten. Expected student outcomes one and ten are, respectively,

1. Have understood and thus be better able to implement the national goals of development and education as they relate to economic development.

10. Have developed further skills in curriculum design for Business Education.

These expected outcomes were attained through the Curriculum Development course. Required in both the Business Studies and Secretarial Studies programs, the Curriculum Development course is designed to equip students with the knowledge, skills, and attitudes that will enable them to participate effectively in decision-making processes related to the school curriculum and to assume the role of curriculum developers in response to the needs created by the Caribbean Examinations Council.

Expected outcome two. The attainment of student outcome two,

2. Have gained comprehensive knowledge of the character, structure and functions of Business within the Caribbean,

is gained through the Small Business 1 and 2, and the Financial Accounting 1 and 2 courses. The two small business courses are designed to provide students with the knowledge and skills needed to operate small business operations within the Caribbean. The two financial accounting courses are limited to Business Studies students and are aimed at equipping students with the principles and methods of financial accounting. It is also expected that the students in these courses will apply what they have learned to the effective development of productive work programs.

Expected outcome three. Expected student outcome three,

3. Have developed skills necessary to cope with change,

is met by the Research Methods 1 and 2, Data Processing 1 and 2, and Word Information Processing 1 and 2 courses, and the Work Experience activity. The research methods courses are designed to emphasize an understanding and usefulness of research in education and the development of basic research skills. The Data Processing 1 and 2 courses are designed to equip the students with the knowledge and skills required in teaching the theory of computer studies, computer operations and programming, and data preparation. The two courses in word information processing are designed for only Secretarial Studies students. These courses aim at developing these students' word processing knowledge of office operations. The work experience component, as indicated earlier, allows students to practice the practical aspects of the Business Studies and Secretarial Studies curricula.

Expected outcomes four and nine. Expected student outcomes four and nine are, respectively:

4. Have developed planning, organizing and supervisory skills for educational administrative purposes.
9. Be able to implement and manage a productive work program in an educational institution.

The Educational Administration and Communication Skills courses are referenced to these two expected outcomes. The educational administration course is designed to equip students with management theories and skills related to supervisory roles and organizational and administrative problems, while the communication skills course aims at developing students' speaking and listening skills which a teacher at this degree level should have.

Expected outcome five. The attainment of expected outcome five,

5. Have acquired and developed skills in interpersonal relations,

is gained through Human Relations and Communication Skills courses. The Human Relations course is designed to teach students how the social and cultural environments influence personality and behavior, the dynamics of group behavior, and theory of motivation. As mentioned above, the Communication Skills course is designed to develop the communication skills of the students to a level commensurate with what is expected of a high school teacher.

Expected outcome six. Expected student outcome six,

6. Have developed an awareness of articulation between Government and other agencies as they relate to Business Education,

is met by the Business Law course and the seminar component. In the Business Law course students are taught the legal aspects of business procedures and practices. In the seminars they are introduced to these different legal issues situated in a practical setting.

Expected outcome seven. Expected student outcome seven is:

7. Have developed instructional materials relevant to Business Education in the Caribbean.

This expected outcome was initially accomplished through the seminar on "Presentation of instructional aids" in the intended curriculum. However, this seminar is no longer offered in the present curriculum.

Expected outcome eight. Expected student outcome eight,

8. Be able to relate Business Education to the total education process,

is met through the Business Law course and the Work Experience component. As mentioned above, the Business Law course deals with the legal aspects of business procedures and practices, while the work experience component allows students to practice the practical aspects of the Business Studies and Secretarial Studies curricula.

Thus, it appears that, with the exception of expected student outcome seven, there is a good fit between the objectives or purposes of the courses in the present programs and the expected student outcomes. This was confirmed by the high school principals who employ the graduates. When asked if the graduates were weak in any area, the principals indicated that the graduates were weak in the use of instructional aids to enhance their teaching, that is, student learning outcome seven. Therefore, *(a) consideration should be given to re-instating of the seminar on the use of instructional materials or alternatively, should the number of summers be increased, introducing an instructional methods course. (b) Should this course be introduced, the objective should build upon the instructional methods course the students complete as part of their diploma.*

Number and Qualifications of Instructional Staff

Evaluation Question 9: What is the number and qualifications of the instructional staff in the B. Ed. Business Education programs?

The intended number of instructors was not specifically stated in the initial program document, nor was there any expectation regarding the balance between male and female instructors. According to the Director of UTECH Human Resources, the intent was to have instructors with at least a Masters' degree in the area of specialization of the course(s) which they were teaching. Listed in Table 21 are the courses taught, gender, number, qualifications, and areas of specialization for the 21 instructors teaching

Table 21
Present Number and Qualifications of Instructional Staff (n = 22)

Courses/ Instructors	Gender	Number	Qualification	Area of Specialization
Communication Skills	Male	1	MA	Arts
	Female	5	MA = 2 M. Ed. = 2 B. Sc. = 1	Arts & English Education Administration
Research Methods 1& 2	Male	1	M. Ed.	Education
	Female	2	M. Ed.	Education
Educational Administration	Female	2	M. Ed.	Education
Curriculum Development	Female	1	M. Ed.	Education
Word Information Pr.	Female	2	BA	Sec. Science
			M. Ed.	Sec. Science
Educational Measurement	Female	2	MA	Psychology
			M. Ed.	Education
Human Relations	Female	1	M. Ed	Education
Small Business	Male	1	M. Sc.	Business
Business Law	Male	1	LL. B	Law
Financial Accounting	Female	1	M. Sc.	Accounting
Caribbean Economy	Male	1	M. Sc.	Economics
Data Processing	Male	1	M. Sc.	Computer Studies

the summer components in 1999. The program document did not state the instructor/student ratio for the intended program. According to the Strategic Plan for Polytechnic University of Jamaica (1995-1998), the instructor/student ratio for the actual program is "1: 12.5" (p. 6). Given the total number of students registered in the three summer components was 130 in the 1999 summer session, the instructor/student ratio of 1:5.6 is well within the instructor/student ratio set for the university.

Of the 22 instructors, 6 were male and 16 were female. Of the 6 male instructors, one had a LL. B degree in Law, and 5 had a Masters degree in the following fields: Arts (1), Computer Studies (1), Education (2), Business Administration (1), or Economics (1). Of the 16 females, 14 possessed a Masters degree in the following fields: English and Arts (2), Education (8), Secretarial Science (2), Psychology (1), or Accounting (1). Two instructors were presently enrolled in doctoral programs at the time of this evaluation study. The qualifications of the present teaching staff essentially meet the intended qualifications: 19 of the 22 present staff possess at least a Master's degree. There are three instructors, one each in Administration, Secretarial Science, and Law who possess only a Bachelor degree (B. Sc., BA, and LL. B).

According to the B. Ed. Program Coordinator, the instructors with a Bachelors degree are employed only in areas where there are no other instructors with a Masters degree to teach the course(s). However, *there is a need to ensure that each instructor in the B. Ed. summer programs possesses at least Master's degree or equivalent before teaching in the program.*

Full-and part-time appointments. Of the six male instructors, only one has full-time teaching appointment. The remaining five are part-time instructors in the B. Ed.

summer component. Of the 16 female instructors, 12 have full-time appointments and four teach part-time during the B. Ed. summer programs.

Research supervisors. There was no information about the number and qualifications of the research supervisors. This lack needs to be addressed given the concerns with the research project raised earlier. The University needs to be sure that the students are being supervised by properly qualified supervisors when they, the students, are completing their capping research projects. Unfortunately, there was no information on gender, number, and qualifications of the research supervisors. As indicated earlier, the Director of UTECH Human Resources stated that the minimum qualification to teach in the program is a Masters degree. However, given the lack of information, the degree to which this qualification was met would not be assessed.

Resources for the B. Ed. Business Studies and Secretarial Studies Programs

Evaluation Question 10: What resources are made available to sustain the B. Ed. Business Studies and Secretarial Studies programs and are they adequate?

Library. The library presently holds 88,000 books and 700 periodical titles (The Calvin McKain Library, 1999). The library participates in the National Information System and the Colleges Libraries Information Network (COLINET).

The UTECH Librarian, while responding to the interview question on the capability of library, said that the library "helps all the faculties in achieving their objectives." This is done by providing services such as reading rooms, seminar rooms, a resource center, and a multi-media laboratory. She stated that the library's goal is "to provide all clients with an integrated information collection: books and non-print media."

The review of the library holdings and the interviews with the students revealed that the collection of books and journals for students and staff in the B. Ed. Business Studies and Secretarial Studies programs is not sufficient. For example, as explained later (see pp. 184-186), during the focus group discussion, the students indicated that there is shortage of new textbooks in the area of Educational Measurement, Caribbean Economy, and Human Relations. Further, the Librarian noted that many of the journals are not received on time and, often, too late to meet instructor and student needs. Therefore, it is recommended that *the B. Ed. program administrators should (a) ensure that at least one textbook for every 10 students in a class be made available in the library, and (b) journals are received in a more timely way for all the courses offered in the B. Ed. Business Studies and Secretarial Studies programs.*

Instructional space. At the time of this study, the Faculty of Education and Liberal Studies had eight classrooms available for the B. Ed. Business Studies and Secretarial Studies summer components. Six of the classrooms are located in three large halls, each of which can be divided into two depending on class requirements. When used as a hall, the seating capacity is 65 students. The remaining two classrooms have a seating capacity of 30 students.

The seats in all classrooms are arranged in lecture type arrangement where the tables and chairs face the chalkboard. The classrooms are equipped with fans to help control the temperature.

There are four lecture theatres that are in close proximity to the eight classrooms located in the Faculty of Education and Liberal Studies. These lecture theatres are also used for the B. Ed. summer programs. The largest of the four lecture theatres has a seating capacity of 150 persons. The seats are arranged in a descending position, with a platform in front. This theatre is equipped with a chalkboard and an over head projector screen. The remaining three theatres have smaller seating capacities of 100 persons each. The chairs are on the same level and are arranged so that students face the chalkboard at the front of the theatre. All four lecture theatres are equipped with air conditioners and fans to control the temperature.

When asked, the B. Ed. Program Coordinator reported that the four lecture theatres are used for the core courses and the smaller classrooms are used for specialist or option courses. She added that the eight smaller classrooms were insufficient in number to accommodate the full summer component across the three modules. The observation of facilities in the Faculty of Education and Liberal Studies conducted by the evaluator also revealed that the number of class spaces available for the B. Ed. Business Studies and Secretarial Studies programs was not sufficient. According to the B. Ed. Program Coordinator, there is an insufficient number of both classrooms and lecture theatres to accommodate the three summer components. Consequently, it is necessary to use facilities in other faculties. This information was reechoed by the students during the focus group discussions, who indicated that they found this arrangement unsatisfactory. Therefore, it is recommended that *the UTECH administrators examine the instructional space made available for the B. Ed. programs during the summer component and work to increase the number of classrooms in the Faculty of Education and Liberal Studies during the summer component.*

Computer labs. At the time of this study, there were five computer labs located in different faculties at UTECH. Three of the five computer labs are for general use by students and staff, while the remaining two are used specifically by the faculty where the labs were located.

Two computer labs are located in the Faculty of Education and Liberal Studies. One is for general use by students and instructors in the faculty, and the other for use by the Secretarial Studies students for keyboarding. The Faculty of Education and Liberal Studies also has one typing room with 29 electric typewriters for the Secretarial Studies students.

The general computer lab has 33 computers and one printer; two of these computers were out of use at the time of this study. The Keyboarding computer lab also had 33 computers but three printers; however, six of the computers and one printer were out of use. Each of the computer labs has an attendant who oversees the lab and assists students with their needs. Each computer has basic software for Word Processing.

The number of computers appears to be sufficient to satisfy the needs of the students. However, in the focus group discussions, the students expressed the need for additional printers in each lab and for additional software programs such as a graphic software program for the Business Studies students and an office job simulation program for the Secretarial Studies students. There is a need for the *UTECH administrators to review the facilities provided in each of the computer labs to ensure that the number and type of computer software provided for the B. Ed. summer component is adequate and up-to-date.*

Audio-visual support. There are one photocopying machine, four overhead projectors and screens, two television sets, and one VCR available for the instructors. This equipment is stored in one room and is maintained and distributed by two full-time technicians. Instructors need to book the equipment they need in advance. The equipment is then delivered to the room by the technicians. However, 83.3% of the instructors indicated a need for more overhead projectors and screens when they responded to their survey questionnaires. Given the number of courses taught each summer, the available audio-visual equipment is inadequate. The need exists for the *UTECH administrators to increase the number of audio-visual devices (e.g., overhead projectors and screens) made available for the B. Ed. Business Studies and Secretarial Studies programs.*

Staff-rooms. There are three staff-rooms in the Faculty of Education and Liberal Studies. One is for the Business Education Division staff, one is for the Liberal Studies and the Education Division staff, and the third is for the Technology and Home Economics Division staff. Each staff-room consists of a large open area divided into workspace stations by acoustical partitions. The instructors who hold administrative positions are given enclosed office spaces within the staff-rooms. Each of the remaining instructors has one of the partitioned offices. Each staff-room is equipped with a number of computers and a printer, an air conditioner, and fans. A secretary for the Division is located in each staff-room. For example, there are four computers and one printer in the Business Education staff-room. One computer is assigned to the secretary for Business Education and another is assigned to the Head of the Division. The remaining two are in the open area and are available to the six full-time instructors in the Division.

According to the Head of the Department of Humanities and Liberal Studies, while the partitioned offices were intended to provide privacy for the instructors, they failed to provide the privacy needed for academic work. Slightly more than three out of the four instructors (77.8%) also indicated that the office spaces did not provide the privacy needed for serious academic work. Further, with one exception, the instructors expressed the need to provide office space for part-time instructors in the B. Ed. degree programs. Therefore, it is recommended that *office spaces in the B. Ed. degree programs be improved in order to provide accommodation for all teaching staff and to maintain the privacy needed for academic work in the office.*

Entry Requirements for the B. Ed. Business Education Programs

Evaluation Question 11: What are the entry requirements for the B. Ed. Business Studies and Secretarial Studies programs and what are the students and graduates academic expectations?

As stated in Chapter Two, the initial entry requirements for the B. Ed. Business Studies and Secretarial Studies programs were:

1. have been awarded a CAST/UTECH Diploma in any of the following specializations: Business Studies, and Secretarial Science;
2. have at least two years' teaching experience at the secondary level or higher;
3. satisfy the selection committee through a qualifying examination and/ or interview.

These entry requirements remain; there has been no changes since the initial implementation of the program. The B. Ed. Program Coordinator described the B. Ed. admission procedure as follows: application forms are obtained at UTECH by applicants. Submitted applications are accompanied by a non-refundable application fee and are received by the Admission Office for all programs at UTECH from January to March. The applications are screened and sorted according to the faculty and program of study to which the students applied. Each faculty is then responsible for the selection of students.

In the case of the Faculty of Education and Liberal Studies, a Selection Committee consisting of four members makes the final selection of applicants. The

Selection Committee consists of full-time specialist instructors, two of whom are in Business Studies and two of whom are in Secretarial Studies. Each applicant is interviewed by the Selection Committee using a standard interview guide to determine the suitability of each applicant. During this interview information about the qualifications, experience (teaching/other), and on-the job responsibilities is obtained. Each applicant is then rated using a five-point (1= poor, 2 = below average, 3 = average, 4 = above average, 5 = good) scale on six characteristics: maturity (problem solving ability), career goals, communication skills, extra curricular activities, philosophy of technical/vocational, and drive to complete courses. A copy of the interview guide is provided in Appendix K. Each member of the Selection Committee rates each applicant. The mean score is computed for the six five-point items. Applicants are required to have minimum score of 15 to be accepted into the program. Accepted applicants are notified in writing by the B. Ed. Program Coordinator of their acceptance. At the same time unsuccessful applicants are also notified in writing. A copy of the B. Ed. acceptance letter is provided in Appendix K. The successful applicants are supplied with the information required to register for the program to which they were accepted.

The evaluator's request to access the students' admission records to verify the selection process was denied by the Admission Office due to the need to protect confidentiality. Therefore, the degree to which the selection process was adhered to could not be directly assessed. However, the former President indicated that UTECH has a flexible entry policy, and added that this flexibility makes it possible for some applicants with lower than intended entry qualifications to gain admission into the program.

While the entry requirements appear to be adequate and are similar to those of other B. Ed. programs in the Teacher Training Colleges in Jamaica, the apparent flexible entry policy makes it possible for some applicants with lower than intended entry qualifications to gain admission into the programs offered at UTECH. Given that it was not possible to track the progress of these students in the present study, there is a need to determine whether the performance levels and completion rates of these students are different from the performance levels and completion rates of the students who fully meet the entrance requirements. The evaluator was denied access to the selection decisions and also the selected students' grades. Hence, it was not possible to compare the performance of students selected following the selection process and the performance of the students who were selected on the basis of other criteria in the present study. There is a need to *ensure that the selection process is fully adhered to and that entry requirements into the B. Ed. programs are fully met.*

Student and graduate academic expectations. The students and the graduates were asked to rate their academic expectations in the B. Ed. Business Education programs and the degree to which they enrolled in their programs to improve themselves. The number of students and graduates in each specification within each Module and the item means and standard deviations for the students and graduates on these items are provided in Table 22.

As shown in Table 22, the students the graduates held high academic expectations and enrolled into the B. Ed. programs to improve themselves. The results of the ANOVA analyses revealed that there were no statistical significant differences among the three student groups and the graduates ($F_{3,234}$ = 1.165; nsd; Table 22, & $F_{3,234}$ = 2.251; nsd; Table 22, Appendix J).

Table 22
Item Mean and Standard Deviation of Students and Graduates: Expected Academic Performance and Reasons for Enrolling into B. Ed. Programs

			Expected Academic Performance		Reasons for Enrolling	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	3.48	0.34	3.80	0.41
	Sec.	15	3.27	0.32	3.47	0.52
Mod.2	Bus.	24	3.29	0.66	3.71	0.46
	Sec.	15	3.43	0.42	3.60	0.51
Mod.3	Bus.	24	3.44	0.43	3.75	0.44
	Sec.	20	3.48	0.41	3.60	0.75
Grad.	Bus.	60	3.30	0.64	3.52	0.50
	Sec.	64	3.27	0.60	3.41	0.73

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

These results were confirmed in the student focus group meetings. Many of the students cited that they expected to do well and were working toward first class standing. They indicated that they wanted to improve their own teaching and to meet the requirements of the Ministry of Education that all high school teachers should possess a B. Ed. degree, with specialization in their teaching area(s). Clearly, the majority of students and graduates held high expectations about their own levels of performance and were clear about why they were enrolled in their programs. Seemingly, they were well motivated to succeed.

CHAPTER SEVEN

PROCESS EVALUATION RESULTS AND FINDINGS

Given the governance and administrative structure, the curriculum, the teaching staff, and the resources identified in the previous section, the next set of questions addressed issues on the quality of implementation of the B. Ed. Business Education programs. The issues considered include program quality, quality and adequacy of course content, quality of instructors and instruction, quality and adequacy of resources, factors that enhance and or affect the implementation of the B. Ed. Business Education programs, and threats to the B. Ed. Business Education programs.

To analyze the results in this chapter, a 4 x 2 (module/graduate-by-program specialization) fully crossed, fixed effects univariate ANOVA was performed. When there is a change in the levels of the module/graduates, 3 x 2, or 2 x 2 ANOVA was used. In cases were the ANOVA results were significant, the Bonferroni multiple comparison tests were conducted. The results of these ANOVA analyses are reported in Appendix J.

As indicated in Chapter Three, the set of items with internal consistency of 0.53 and above were analyzed at the sub-scale level, with the results reported. The set of items with internal consistency lower than 0.53 were analyzed at the item level, hence no internal consistency was reported.

Program Quality

Evaluation Question 12: What is the quality of the B. Ed. Business Studies and Secretarial Studies programs as implemented?

The students and graduates were asked to rate the quality of the modules they were presently enrolled in and the previous components they had completed. The item means and standard deviations computed across the 14 items used for this purpose are reported Table 23 for each student group and the graduates. The internal consistencies of the set of items were 0.80 for the students and 0.53 for the graduates.

Table 23
Item Mean and Standard Deviation of Students and Graduates: Program Quality

			Program Quality	
Group	Specialization	n	$\overline{X}$	*SD*
Module 1	Business	20	2.91	0.20
	Secretarial	15	2.72	0.36
Module 2	Business	24	2.41	0.33
	Secretarial	15	2.48	0.36
Module 3	Business	24	2.32	0.37
	Secretarial	20	2.38	0.38
Graduate	Business	60	2.61	0.23
	Secretarial	64	2.60	0.23

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

As shown in Table 23, with the exception of Module One students, the students and the graduates held a somewhat poor view of the quality of the program. The results of the ANOVA/Bonferroni analyses revealed that the Module One students possessed a significantly more positive view about program quality than Module Two and Module Three students and the graduates, and the graduates possessed a significantly more positive view about the program quality than the Module Two and Module Three students ($F_{3,234} = 20.11$; $p < 0.01$; Table 23, Appendix J).

Thus, while the general perceptions about program quality were generally poor, Module One students possessed the most positive view. The written comments of the

Module One students revealed that they were impressed by the "glamour" and "status" associated with being enrolled in a B. Ed. program while at the same time acknowledging that their experience in the program was somewhat limited. The graduates indicated in their survey that they had experienced some benefits of the program in their teaching. Despite these positive comments about the program quality, the general perception among all student groups and the graduates is not high.

However, both the Dean and the B. Ed. Program Coordinator commented that they believed that the expectations and needs of the students and their employers were being met by the two B. Ed. Business Education programs. The Dean, for example, pointed out that one of the objectives of the B. Ed. Business programs is to produce graduates who would teach Business subjects in their high schools and that, by doing so, the expectations and needs of the students and their employers were met. She added that the results of the CXC examinations for the Business subjects provided additional evidence that the students' and employers' expectations and needs were being met through the B. Ed. Business Education programs.

Somewhat in contrast, the three Ministry of Education officers felt that not all of the students and employers expectations and needs were being met. They indicated that the graduates from both programs did not have the knowledge and skills needed to prepare effective lesson plans and instructional aids for their classes. Beyond this point, they were unwilling to discuss further concerns about the B. Ed. Business Education programs. They did point out, in agreement with the Dean, that the high school students were performing well on the CXC Business examinations.

Quality and Adequacy of Course Components

Evaluation Question 13: What is the quality and adequacy of course components of the B. Ed. Business Studies and Secretarial Studies programs as implemented?

To address this question, the following five components were examined: program orientation, summer courses, fall/winter seminar, work experience, and research project. Presented first is the B. Ed. program orientation.

B. Ed. Program Orientation

The students and the graduates were asked if they found the B. Ed. program orientation useful. The number of students and graduates in each specialization within each module and the item means and item standard deviations are provided in Table 24.

As shown in Table 24, the students, particularly in Modules Two and Three, and graduates rated the orientation that was provided to them at the beginning of their programs as somewhat not useful. While the results of the ANOVA/Bonferroni analyses revealed that the graduates possessed significantly more positive views about the usefulness of the B. Ed. program orientation than the Module Two and Module Three students ($F_{3,234} = 8.252$; $p < 0.01$; Table 24, Appendix J).

The students who participated in the focus group discussions and the B. Ed. Program Coordinator indicated that the orientation program was not well organized. The Module Three students added that the orientation program was offered on the same day as they were to register. Consequently, they were not able to take part on all of the orientation activities. The B. Ed. Coordinator pointed out that it was necessary to hold the orientation and registration on the same day because the principals of the schools in

Table 24

Item Mean and Standard Deviation of Students and Graduates: B. Ed. Program Orientation

Group	Specialization	n	B. Ed. Program Orientation	
			$\overline{X}$	*SD*
Mod.1	Business	20	2.40	0.68
	Secretarial	15	2.40	0.74
Mod.2	Business	24	1.92	1.06
	Secretarial	15	1.93	1.10
Mod.3	Business	24	2.13	0.54
	Secretarial	20	1.65	0.49
Grad.	Business	60	2.65	0.97
	Secretarial	64	2.41	0.96

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

which the students work could only allow one day for both activities before the summer sessions began. She added that the orientation and registration took place approximately one week prior to the commencement of classes. It is therefore recommended that *the administrators of the B. Ed. programs review the orientation procedure and its overlap with the registration to ensure a positive experience for all incoming students.*

Summer Courses

The quality of the summer courses was examined by looking at the appropriateness and clarity of the course objectives; the degree to which the course objectives met with the needs and expectations of the students, graduates, and employers; and the adequacy of courses.

Course objectives. Course objectives were not provided to the students for five courses (one course in Module One, two courses in each of Module Two and Module Three[3]). The B. Ed. Program Coordinator explained that for two of the courses the instructors were new and had only recently been appointed. In the case of the remaining three, the Coordinator incorrectly believed that the statement of objectives was included with the course outlines. Consequently, the students commented only on the courses for which there was a set of objectives.

The item means and standard deviations for the items dealing with the appropriateness and clarity of the course objectives are provided in Table 25. As shown,

Table 25
Item Mean and Standard Deviation of Students and Graduates: Appropriateness and Clarity, Congruent with Students', Graduates', Employers' Expectations and Needs

			Appropriateness and Clarity[a]		Congruent with Stud. and Grad. Exp. and Needs[a]		Congruent with Employer Exp. and Needs[b]	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	3.25	0.79	3.05	0.61	2.35	0.67
	Sec.	15	3.07	0.59	2.80	0.78	2.07	0.70
Mod.2	Bus.	24	2.21	0.72	3.25	0.68	1.92	0.50
	Sec.	15	2.20	0.94	3.20	0.68	1.80	0.41
Mod.3	Bus.	24	3.04	0.81	2.17	0.64	1.92	0.58
	Sec.	20	3.25	0.85	2.30	0.73	1.85	0.67
Grad.	Bus.	60	2.30	0.87	2.98	0.68	2.32	0.65
	Sec.	64	2.14	0.97	2.97	0.91	2.52	0.56

[a] 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree
[b] 1 = Not very well, 2 = Well, and 3 = Very well

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[3] The courses are not identified to protect the confidentiality of the instructors.

the Module One and Module Three students generally agreed that the objectives provided to them were appropriate and clearly stated, while the Module 2 students and the Graduates disagreed. The results of the ANOVA/Bonferroni analyses revealed that the Module One and Three students possessed significantly more positive views about the appropriateness and clarity of the course objectives than the Module Two students and the graduates ($F_{3,234} = 20.552$; $p < 0.01$; Table 25, Appendix J).

Needs and expectations of students and graduates. The item means and standard deviations for the items dealing with the degree to which the course objectives met the needs and expectations of the students and graduates are provided in Table 25. As shown, with the exception of Module Three students, the students in Module One, Two and the graduates generally agreed that the objectives provided were congruent with what they expected and needed. The results of the ANOVA/Bonferroni analyses revealed that the Module Three students disagreed with the statement that the objectives of the course were congruent with their needs and expectations while the remaining students and graduates agreed ($F_{3,234} = 14.225$; $p < 0.01$; Table 25, Appendix J).

Needs and expectations of employers. The item means and standard deviations for the items dealing with the degree to which the course objectives met the needs and expectations of the employers of the students and graduates are provided in Table 25. As shown, the students and graduates generally agreed that the objectives provided were congruent with their employers needs and expectations. The results of the ANOVA/Bonferroni analyses revealed that the Module Two and Three students were significantly lower in their ratings than the Module One students and the graduates ($F_{3,234} = 13.271$; $p < 0.01$; Table 25, Appendix J).

The information gathered in the student focus group discussions supports the above findings. There was general consensus that the objectives were appropriate and clearly stated. The Module One and Module Two students who took part in the focus group interviews felt that the stated objectives met their expectations and needs. The Module Three students, however, said that the objectives did not meet their expectations and needs, and pointed out that they expected to learn more about the use of computer programs. The graduates, in their survey, were asked about the extent to which they used what they had learned in their B. Ed. program in their own teaching. Over half of the Business (55.0%) and Secretarial (62.5%) graduates indicated that they used what they had learned to a “high” degree. Slightly more than a third (38.3%) indicated they used what they had learned to a “moderate” degree. The students in Module Two and Module Three who took part in the focus groups tended to agree that the course objectives were not congruent with the expectations and needs of their employers.

When all of these findings are considered, it is clear that each course must have a clear statement of objectives that reflects the outcomes to be expected by students and their employers and that will serve to guide the development and implementation of relevant opportunities to learn and to guide the subsequent evaluations of the students. Toward this end, it is recommended that *clearly stated and relevant course objectives be provided for each course without fail and that the objectives reflect the expectations and needs of the students and their employers.*

Adequacy of Courses

The adequacy of the courses as perceived by the students and graduates was addressed in a set of five questions. The questions dealt with the congruency between course objectives and the course content, course organization, degree to which the students were challenged by the course content, currency of course content, and increase in knowledge through completion of the courses. The item means and standard deviations computed across the 5 items in the set are reported in Table 26 for each student group and the graduates. The internal consistencies of the set of items were 0.63 for the students and 0.76 for the graduates.

Table 26
Item Mean and Standard Deviation of Students and Graduates: Adequacy of Courses

Group	Specialization	n	Adequacy of Courses	
			$\overline{X}$	*SD*
Module 1	Business	20	3.15	0.34
	Secretarial	15	2.91	0.44
Module 2	Business	24	2.79	0.30
	Secretarial	15	2.71	0.42
Module 3	Business	24	2.69	0.44
	Secretarial	20	2.55	0.54
Graduate	Business	60	3.08	0.55
	Secretarial	64	3.08	0.51

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

As shown in Table 26, with the exception of Module Three students, the students and the graduates held a somewhat positive view of the adequacy of courses. The results of the ANOVA/Bonferroni analyses revealed that the Module One students and the graduates possessed significantly more positive view about the adequacy of courses than Module Two and Module Three students ($F_{3,234} = 12.235$; $p < 0.01$; Table 26, Appendix These results are reflected in the comments made by the students in the focus groups. Both[4] the Module Two students and the Module Three students singled out only one course among each of the courses offered in Module One and Module Three and two courses in Module Two as being adequate; they felt the remaining courses needed to be improved.

The Dean, B. Ed. coordinator, and the three Ministry of Education Officers indicated that the courses offered in both B. Ed. programs were adequate and met the objectives set for each. One of the Education Officers added that the Professional Development Unit of the Ministry of Education invited some of the B. Ed. graduates to conduct workshops on supervision and administration and on classroom assessment for new, beginning teachers.

Clearly, there is lack of agreement between the students, especially Modules Two and Three students, and the program administrators and Ministry officials. An evaluation of each specific course was beyond the intent of the present evaluation. It is therefore recommended that *the B. Ed. program administrators have each course evaluated by evaluators in the subject area and from outside of the University with the intent of providing constructive feedback that can be used to improve the courses offered.*

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[4] The Module One students did not comment on the adequacy of their courses, citing as their reason the fact that at the time of the focus groups, they were only half way through their courses.

Fall/Winter Seminars

As indicated earlier, the fall/winter seminars were intended to provide continuity between summers and to elaborate upon the previous summer courses. The students and graduates perceptions of the adequacy of the fall/winter seminars are reported in Table 27. Since the Module One students had not yet attended the seminars for Module One, they are not listed in this table or included in the analyses that follows.

As shown in Table 27, the Module Two and Three students and the graduates held somewhat negative views of the adequacy of the seminars. The results of the ANOVA/Bonferroni analyses revealed that the Module Three students' ratings were significantly lower than their ratings provided by the Module Two students and the graduates ($F_{2,201} = 4.910$; $p < 0.01$; Table 27, Appendix J).

Table 27
Item Mean and Standard Deviation of Students and Graduates: Adequacy of Seminars

Group	Specialization	n	Adequacy of Seminars	
			$\overline{X}$	*SD*
Module 2	Business	24	2.21	0.83
	Secretarial	15	2.40	0.83
Module 3	Business	24	1.75	0.68
	Secretarial	20	2.05	0.61
Graduate	Business	60	2.33	0.88
	Secretarial	64	2.41	0.97

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

The Module Two and Module Three students who took part in the focus group discussions identified four concerns with the seminars. First, they indicated that it was difficult to get time off from school to attend the seminars. Second, they found that preparing for the seminars interfered with their regular full-time teaching jobs. Third, they indicated that for some seminars, the instructors were ill prepared and did not show much enthusiasm. Lastly, the students expressed the fact that some seminar sessions began late. This in turn led to a late arrival back home, particularly for the students who lived in the rural areas.

The B. Ed. Program Coordinator indicated that the seminar component was designed to accommodate the work schedule of the students. She also indicated that some of the principals who employed the students were reluctant to release them for the seminars. She further indicated that the instructors who taught the seminars were interested in teaching these seminars and were well prepared. Lastly, while she agreed with the concern of the students about starting the sessions late, she indicated that this was so because the students were always late to the sessions. The Dean was unwilling to comment about the seminars. The Education Officers also declined since they felt their knowledge about the seminars was limited and therefore they would not be able to provide complete information about them.

The evaluator reviewed the seminar evaluations completed by the students at the end of each seminar. A copy of the seminar evaluation form is provided in Appendix L. These evaluations revealed that students rated the seminars as satisfactory. However, the written comments of the students revealed that they felt: (a) that more time should be given for the presentations; and (b) that more hands-on experience should be included for better learning of the concepts discussed.

Clearly, there are differences between the three sets of findings presented above. With respect to the end of seminar evaluations, it should be remembered that these evaluations were completed by the students with the instructors present and that the instructors collected the forms. Thus, it is possible that the presence of the instructors while the students completed their evaluations and the fact that the instructors collected the completed forms may have influenced the students' responses. The disagreement between what the students indicated on their survey forms and said in their focus group discussions and what the B. Ed. Coordinator said is more troubling. Consequently, it is recommended that *(a) the B. Ed. degree program administrators meet with the presenters of these seminars with a view of revising the presentations to include more hands-on experience for the students, (b) steps such as using a variety of teaching methods and aids be taken to ensure that the seminar presentations are interesting and stimulating, (c) the work schedule of the students should be considered when scheduling the seminar, and (d) employers become more involved in the operation of the program, perhaps through representation on a new advisory board, so that they are more aware of what is expected of them.*

Utility of Work Experience

As indicated earlier, the work experience component was intended to allow the students to practice the practical aspects of the Business Education curriculum. The students and graduates perceptions of the degree to which the work experience component was useful are reported in Table 28. Since the Module One and Module Two students had not yet completed the work experience component, they are not included in this analyses that follows.

As shown in Table 28, the Module Three students tended to agree that the work experience component of the B. Ed. programs was useful while the graduates appeared to be less certain. However, the results of the ANOVA analysis revealed that there was no statistical significant difference between the two groups ($F_{1,164} = 3.612$; nsd; Table 28, Appendix J).

Table 28
Item Mean and Standard Deviation of Students and Graduates: Utility of Work Experience

Group	Specialization	n	Utility of Work Experience	
			$\overline{X}$	*SD*
Module 3	Business	24	2.88	0.95
	Secretarial	20	3.05	0.83
Graduate	Business	60	2.63	0.88
	Secretarial	64	2.70	0.87

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

During the focus group discussions, the Module Three students expressed that some of their principals did not like to release them to participate in the work experience component. The B. Ed. Program Coordinator agreed. However, she indicated that the some students did not familiarize their principals with the nature of their programs so that the necessary arrangements could be made to release them from their teaching duties for the work experience. Further, the B. Ed. Program Coordinator expressed that there were difficulties in placing students in the right work experience situations. She, however, expressed that this problem was being solved by identifying more stations where students could be sent.

The evaluator reviewed the work experience evaluation reports by employers of the students. The reports revealed that the students performance during the work experience was favorable. To avoid the delay in releasing the students by their principals, it is recommended that *the B. Ed. program planners work with the principals in order to involve the principals more in the operation of the program so that they would more aware of the intent and purpose of the work experience component and the need to release the students from their teaching duties.*

Research Project

The findings from the research project component were discussed earlier in the input section. There (see p. 113) it was stated that a high number of students had not graduated from the program because they had not completed their research projects. The B. Ed. Program Coordinator expressed difficulty in finding supervisors for the students. Further, no records were found about the research supervisor/student ratio and the like. Thus, the need for the revision of the research component of the B. Ed. Business Education programs can not be overemphasized.

Overlapped Course Content

Evaluation Question 14: What is the extent of overlap among courses within the Business Studies program, within the Secretarial Studies program, and between the Diploma Business Education and B. Ed. Business Education programs?

Another issue with the summer course component is the degree to which courses overlap within modules, between modules, and between the B. Ed. Business Education and Diploma programs. Each of these forms of overlap was identified by the students and the graduates. Shown in Table 29 are the courses the students and graduates identified as overlapping together with the percentage of each group who indicated so. The last row contains a pair of courses identified by the instructors.

Overlap between the Diploma and the B. Ed. programs

Diploma Accounting and B. Ed. Financial Accounting. The only identified overlap between the Diploma and B. Ed. Business Education programs was between the Financial Accounting 1 course offered as part of the Business Studies program in Module Two and the Accounting course offered as part of the Diploma program in the final year. As shown

Table 29
Percentage of Students, Graduates, and Instructors on Overlapped Courses

Group	Specialization	n	Course	Percentage
Mod. 1	Business	20	None	0 (0.0%)
	Secretarial	15	None	0 (0.0%)
Mod. 2	Business	24	Fin. Acct. 1 & Accounts	15 (62.5%)
	Secretarial	15	None	0 (0.0%)
Mod. 3	Business	24	Curriculum. & Measurement	17 (70.8%)
			Research 2 & Measurement	19 (79.2%)
			Hum. Rel. & Administration	13 (54.2%)
			Fin. Acct. 1 & Accounts	20 (83.3%)
	Secretarial	20	Curriculum & Measurement	12 (60.0%)
			Research 2 & Measurement	13 (65.0%)
			Hum. Rel. & Administration	9 (45.0%)
			Word 1 & Word 2	7 (35.0%)
Grads.	Business	60	Curriculum & Measurement	49 (81.7%)
			Research 2 & Measurement	52 (86.7%)
			Hum. Rel. & Administration	34 (56.7%)
			Fin. Acct. 1 & Accounts	55 (91.7%)
	Secretarial	64	Curriculum & Measurement	45 (70.3%)
			Research 2 & Measurement	50 (78.1%)
			Hum. Rel. & Administration	39 (60.9%)
			Word 1 & Word 2	31 (48.4%)
Instructors	Both groups	3	Research 2 & Measurement	3 (100.0%)

in Table 29, 62.5% of the Module Two students, 83.3% of Module Three students, and 91.7% of the Business Studies graduates indicated that the Accounting course in the Diploma Program and the Financial Accounting 1 course in Module Two overlapped.

The Accounting course in Business Studies Diploma program introduces students to major topics such as the principles and purposes of accounting and the preparation of financial statements. In Financial Accounting 1, Business Studies students are reintroduced to the same topics, but with the intent of providing an in depth analysis of some of the topics.

The same instructor taught both courses. She agreed that some topics in the diploma program were repeated in the degree program. She explained that the repetition of some topics was designed to refresh students' knowledge of the course, since some of the students had problems understanding some topics in the Accounting course.

It is reasonable to expect some topics to be repeated in sequentially ordered courses to provide students with a more solid foundation needed to better learn and understand future topics. Thus, this could mean that the Business Studies students and graduates might have misunderstood the purpose of what was essentially a spiral curriculum used by the instructor.

Overlap between Module Two and Three Courses

The students in both Modules Two and Three indicated that there were courses that overlapped between Modules Two and Three. Three pairs were identified: (a) Research Methods 2 and Educational Measurement, (b) Human Relations and Educational Administration, and (c) Word Information Processing 1 and 2.

Research Methods 2 and Educational Measurement. As shown in Table 29, 79.2% of the Module Three Business Studies students, 86.7% of the Business Studies graduates, 65.0% of the Module Three Secretarial Studies students, and 78.1% of the Secretarial Studies graduates indicated that the Research Methods 2 (Module Two) and Educational Measurement (Module Three) courses overlapped. Further, the three instructors who taught both groups also agreed that the two courses overlapped. According to the instructors, the overlapped topics included measurement scales, graphs, reliability and validity, and measures of central tendency, variability, and relationships. Review of the two course outlines confirmed that the two courses overlapped.

Human Relations and Educational Administration. Approximately half of the students in Module Three and the graduates indicated that there was overlap between the Human Relations (Module Three) and Educational Administration (Module Two) courses (Table 29). The instructors of these courses agreed that the topic "motivation theory" was taught in both courses. According to these instructors, the fact that this topic was taught in both courses should not be taken as an incident of overlap since the material included under this topic was course specific. Review of the two course outlines confirmed that there was no overlap. It appears the students may have been mistaken in this case.

Word Information Processing 1 and 2. In the case of the Word Information Processing courses, 35.0% of the Module Three students and 48.4% of the Secretarial Studies graduates indicated that the Word Information Processing 1 and 2 courses (see Table 29) overlapped. The two instructors who taught the two courses disagreed. Again, the Secretarial Studies students might have misunderstood the purpose of the sequentially ordered curriculum used by these instructors in teaching the Word Information

Processing 1 and 2 courses. Interestingly no comments were made during the focus group discussions. Review of the two course outlines confirmed that there was no overlap.

Overlap within Module Three Courses

One pair of courses, Curriculum Development and Educational Measurement in Module Three was identified as overlapping course.

As reported in Table 29, 70.8% of the Module Three Business Studies students, 81.7% of the Business Studies graduates, 60.0% of the Secretarial Studies students, and 70.3% of the Secretarial Studies graduates reported that there was overlap between these two courses.

The instructors of both courses agreed that some topics taught in both courses might have been perceived by the students and the graduates as overlapping because of the common topic "types of evaluation." According to the Curriculum Development instructor, the topic on "formative and summative evaluation" concerns the different forms of evaluation used in curriculum evaluation. The Educational Measurement instructor explained that this topic concerns the different purposes of assessment when evaluating students' achievement. Review of the two course outlines confirmed that the topic on types of evaluation was designed to give students similar content in different contexts.

In summary, what seemed to be an overlap in the degree Financial Accounting course and the Diploma Accounting course, and in the Word Information Processing 1 and 2 courses was due to the nature of the spiral curriculum being used in teaching the two courses. Further, while the students perceived there was overlap, it appears there was no overlap between the Human Relations and Educational Administration courses, and between the Curriculum Development and Educational Measurement courses.

However, there was an overlap between the Research Methods 2 and Educational Measurement courses. It is therefore recommended that that *the Research Methods 2 and Educational Measurement courses be reviewed with the intent of removing what appears to be a rather extensive overlap between these two courses.*

Importance and Relevance of B. Ed. Business Education Courses

Evaluation Question 15: How important and relevant are the courses in each of the three modules and the fall/winter seminars following Module One and Two?

The measurement of the importance and relevance of the courses in the students and graduates' surveys consisted of two 4-point Likert type items for each course/seminar, one for importance and the second for relevance.

Module One Courses

In the case of Module One, the Module One students rated the importance and relevance of the courses they were taking. They did not, however, rate the seminars that followed the Module One courses since they had not completed the Module One summer component. The item means and standard deviations are reported in Table 30. Values of the F-ratios yielded by each of these analyses are reported in Appendix J. The results are presented below for each of the five courses and the seminars.

Communication Skills. As shown in Table 30, the four groups rated the Communication Skills course between important to very important, and between relevant to very relevant. The results of the ANOVA/Bonferroni analyses revealed that on

Table 30

Item Mean and Standard Deviation of Students and Graduates: Importance and Relevance of Module One Courses

				Importance		Relevance	
Course	Group	Special.	n	$\overline{X}$	SD	$\overline{X}$	SD
Communication Skills	Mod. 1	Bus.	20	3.45	0.95	2.85	0.81
		Sec.	15	3.13	0.92	4.00	0.00
	Mod.2	Bus.	24	3.75	0.44	3.54	0.51
		Sec.	15	3.53	0.52	3.60	0.63
	Mod.3	Bus.	24	3.58	0.50	3.71	0.46
		Sec.	20	3.75	0.55	3.70	0.47
	Grads.	Bus.	60	3.70	0.50	3.58	0.53
		Sec.	64	3.73	0.54	3.70	0.49
Research Methods 1	Mod. 1	Bus.	20	3.15	0.67	3.30	0.47
		Sec.	15	3.87	0.35	3.33	0.49
	Mod.2	Bus.	24	3.29	0.46	3.46	0.51
		Sec.	15	3.47	0.52	3.20	0.56
	Mod.3	Bus.	24	3.25	0.61	2.88	0.68
		Sec.	20	3.35	0.75	3.15	0.75
	Grads.	Bus.	60	3.20	0.73	3.20	0.55
		Sec.	64	3.31	0.64	3.20	0.62
Data Processing 1	Mod. 1	Bus.	20	2.00	0.00	2.75	0.79
		Sec.	15	2.00	0.00	2.80	0.94
	Mod.2	Bus.	24	2.38	0.58	2.38	0.58
		Sec.	15	2.33	0.49	2.27	0.46
	Mod.3	Bus.	24	2.13	0.68	2.38	0.58
		Sec.	20	2.05	0.51	2.30	0.66
	Grads.	Bus.	60	2.47	0.91	2.57	0.67
		Sec.	64	2.42	0.94	2.50	0.71
Business Law	Mod. 1	Bus.	20	3.25	0.91	2.85	0.49
		Sec.	15	2.67	0.72	3.00	0.66
	Mod.2	Bus.	24	3.38	0.58	3.25	0.44
		Sec.	15	3.40	0.51	3.13	0.35
	Mod.3	Bus.	24	3.25	0.53	3.21	0.59
		Sec.	20	3.30	0.57	3.10	0.64
	Grads.	Bus.	60	3.15	0.52	3.12	0.32
		Sec.	64	3.11	0.44	3.09	0.34

Table 30a (cont.)

Course	Group	Special.	n	$\overline{X}$	SD	$\overline{X}$	SD
Small Business 1	Mod. 1	Bus.	20	2.95	1.00	3.20	0.83
		Sec.	15	2.93	0.59	3.27	0.46
	Mod.2	Bus.	24	3.25	0.61	3.29	0.55
		Sec.	15	3.27	0.59	3.00	0.38
	Mod.3	Bus.	24	3.04	0.55	3.04	0.55
		Sec.	20	3.25	0.55	3.00	0.65
	Grads.	Bus.	60	2.97	0.74	3.07	0.36
		Sec.	64	2.89	0.57	2.98	0.49
Seminars	Mod.2	Bus.	24	2.67	0.57	2.71	0.69
		Sec.	15	2.87	0.64	2.73	0.46
	Mod.3	Bus.	24	2.79	0.59	2.88	0.54
		Sec.	20	2.95	0.51	3.10	0.31
	Grads.	Bus.	60	2.43	0.85	2.48	0.63
		Sec.	64	2.16	0.91	2.34	0.60

1 = Not very important, 2 = Not important, 3 = Important, and 4 = Very important
1 = Not very relevant, 2 = Not relevant, 3 = Relevant, and 4 = Very relevant

importance, the graduates rated the importance slightly higher than the three student groups ($F_{3,234} = 4.707$; $p < 0.01$; Table 30, Appendix J). The results of the ANOVA analysis for relevance revealed that there was no statistical significant difference among the three student groups and the graduates ($F_{3,234} = 2.097$; nsd; Table 30, Appendix J).

Research Methods 1. As shown in Table 30, the four groups indicated that the Research Methods 1 course was important to very important, and relevant to very relevant. The results of the ANOVA analyses revealed that for both importance and relevance there was no statistical significant difference among the three student groups and the graduates ($F_{3,234} = 2.233$; nsd; Table 30; & $F_{3,234} = 2.517$; nsd; Table 30, Appendix J).

Data Processing 1. As shown in Table 30, the students rated the Data Processing 1 course as not important and not relevant; the graduates were less certain. These results were confirmed by the ANOVA/Bonferroni analyses ($F_{3,234} = 4.607$; $p < 0.01$; Table 30, Appendix J). The students and graduates were not certain about the relevance of this courses. While the ANOVA/Bonferroni analyses revealed that the Module One students rated the relevance slightly higher than the Module Two and Three students and the graduates. ($F_{3,234} = 3.618$; $p < 0.01$; Table 30, Appendix J).

Business Law. As shown in Table 30, the students and the graduates rated the Business Law course as important and relevant. The results of the ANOVA/Bonferroni analyses revealed that on importance, the Module One students was significantly below that for the two remaining student groups and for the graduates ($F_{3,234} = 4.129$; $p < 0.01$; Table 30, Appendix J). There was no statistical significant difference among the three student groups and the graduates for relevance ($F_{3,234} = 2.519$; nsd; Table 30, Appendix J).

Small Business 1. As shown in Table 30, the students and the graduates rated the Small Business 1 course as both important and relevant. While the results of the ANOVA/Bonferroni analyses revealed that the Module Two students and graduates differed significantly ($F_{3,234} = 3.078$; $p < 0.01$; Table 30, Appendix J), the students and graduate generally felt that the Small Business 1 course was important. The results of the ANOVA analysis revealed that there was no statistical significant difference among the three student groups and the graduates for relevancy ($F_{3,234} = 1.833$; nsd; Table 30, Appendix J). Again, the students and graduates found the Small Business 1 course to be relevant.

Seminars. As shown in Table 30, the students and the graduates tended to rate the seminars as somewhat important and relevant. While the results of the ANOVA/Bonferroni analyses on importance revealed that the Module Two students was significantly higher in their ratings than the graduates ($F_{2,201} = 11.482$; $p < 0.01$; Table 30, Appendix J), While on relevance, the results of the ANOVA analysis revealed that the Modules Two and Three students rated the relevance of the seminar course significantly higher than the graduates ($F_{2,201} = 16.889$; $p < 0.01$; Table 30, Appendix J).

During the focus group discussions, the students confirmed the importance and relevance of the Communication Skills, Research Methods 1, Business Law, and Small Business 1. However, the students indicated that the Data Processing 1 course contained a computer programming language that did not provide them with the right knowledge and skills needed to teach the syllabus that they were required to teach in the high schools. Further, The students indicated that there was not have enough time to learn the skills needed for the Communication Skills and the Research Methods 1 courses. Therefore, it was recommended that: *(a) the B. Ed. program planners review the length of the summer component with a view to increasing it in order for the students to have more time to learn the communication skills needed to be a good Business teacher and the skills needed to conduct a research study, and (b) The B. Ed. program planners revise the Data Processing 1 course to include computer programming language that is related to what the graduates of the B. Ed. Business Education programs will teach in the high schools.*

Module Two Courses

In the case of Module Two students, they were asked about the importance and relevance of Module Two courses they were presently in and the seminars they had completed in Module One. The Module Three students and the graduates were asked about the importance and relevance of Module Two courses and all the seminars they had completed. The item means and standard deviations are reported in Table 31.

Educational Administration. As shown in Table 31, the three groups indicated that the Educational Administration course was important to very important and relevant to very relevant. The results of the ANOVA analysis revealed that there was no statistical significant difference among the two student groups and the graduates ($F_{2,201} = 1.982$; nsd; Table 31, Appendix J). The results of the ANOVA/Bonferroni analyses revealed that the graduates rated the relevance lower than the Module Two and Module Three students for relevance ($F_{2,201} = 4.171$; $p < 0.01$; Table 31, Appendix J). However, the differences are quite small.

Research Methods 2. The Module Two and Module Three students and the graduates rated the Research Methods 2 course between important and very important and relevant. The results of the ANOVA analyses revealed that there was no statistical significant difference among the two student groups and the graduates ($F_{2,201} = 1.015$; nsd; Table 31; & $F_{2,201} = 0.696$; nsd; Table 31; Appendix J).

Data Processing 2. The two student groups and graduates rated the Data Processing 2 course as somewhat important and somewhat relevant. The results of the ANOVA/Bonferroni analyses revealed that, for importance, the graduates were significantly different in their ratings from Module Two and Module Three students

Table 31

Item Mean and Standard Deviation of Students and Graduates: Importance and Relevance of Module Two Courses

				Importance		Relevance	
Course	Group	Special.	n	$\overline{X}$	SD	$\overline{X}$	SD
Educational Admin.	Mod.2	Bus.	24	3.46	0.51	3.46	0.51
		Sec.	15	3.20	0.41	3.47	0.64
	Mod.3	Bus.	24	3.58	0.50	3.50	0.59
		Sec.	20	3.55	0.69	3.60	0.69
	Grads.	Bus.	60	3.42	0.59	3.27	0.58
		Sec.	64	3.38	0.60	3.28	0.58
Research Methods 2	Mod.2	Bus.	24	3.42	0.50	3.21	0.59
		Sec.	15	3.33	0.49	3.27	0.46
	Mod.3	Bus.	24	3.17	0.92	3.08	0.58
		Sec.	20	3.15	0.88	3.10	0.72
	Grads.	Bus.	60	3.17	0.72	3.18	0.54
		Sec.	64	3.33	0.57	3.20	0.62
Data Processing 2	Mod.2	Bus.	24	2.17	0.92	2.83	0.82
		Sec.	15	2.53	0.83	2.27	0.46
	Mod.3	Bus.	24	2.13	0.99	2.29	0.55
		Sec.	20	2.10	0.91	2.30	0.66
	Grads.	Bus.	60	2.62	0.76	2.57	0.67
		Sec.	64	2.58	0.73	2.52	0.71
Small Business 2	Mod.2	Bus.	24	3.25	0.53	3.29	0.55
		Sec.	15	3.20	0.78	3.00	0.38
	Mod.3	Bus.	24	2.75	0.79	2.54	0.72
		Sec.	20	2.90	0.91	2.90	0.72
	Grads.	Bus.	60	3.02	0.57	3.10	0.35
		Sec.	64	2.89	0.59	2.98	0.49
Financial Accounting 1	Mod.2	Bus.	24	3.42	0.58	3.42	0.50
	Mod.3	Bus.	24	3.46	0.59	2.96	0.96
	Grads.	Bus.	60	3.38	0.52	3.37	0.52
Word Information Processing 1	Mod.2	Sec.	15	3.53	0.52	3.40	0.51
	Mod.3	Sec.	20	3.70	0.47	3.75	0.44
	Grads.	Sec.	64	3.59	0.53	3.63	0.52
Seminar	Mod.3	Bus.	24	2.79	0.59	2.88	0.54
		Sec.	20	2.95	0.51	3.10	0.31
	Grads.	Bus.	60	2.43	0.85	2.48	0.62
		Sec.	64	2.16	0.91	2.34	0.60

1 = Not very important, 2 = Not important, 3 = Important, and 4 = Very important
1 = Not very relevant, 2 = Not relevant, 3 = Relevant, and 4 = Very relevant

($F_{2,201}$ = 5.966; $p < 0.01$; Table 31, Appendix J), while for relevance, there was no statistical significant difference among the two student groups and the graduates ($F_{2,201}$ = 2.293; nsd; Table 31, Appendix J).

Small Business 2. As shown in Table 31, the Module Two student and the graduates rated the Small Business 2 course as important and relevant. The Module Three students were less certain. The results of the ANOVA/Bonferroni analyses for importance revealed that the Module Two students were significantly different from the Module Three students in their ratings ($F_{2,201}$ = 3.891; $p < 0.01$; Table 31, Appendix J), and for relevance, the Module Two students were significantly different from Module Three students and the graduates in their ratings ($F_{2,201}$ = 8.317; $p < 0.01$; Table 31, Appendix J).

Financial Accounting 1. The Business Studies students and graduates rated Financial Accounting 1 course as very important and very relevant. For importance, the results of the ANOVA analysis revealed there was no statistical significant difference among the modules/graduates ($F_{2,107}$ = 0.163; nsd; Table 31, Appendix J), and for relevance, there was a statistical significant difference among the modules/graduates ($F_{2,107}$ = 4.149; $p < 0.01$; Table 31, Appendix J). Examination of the item means showed that the graduates perceived the Financial Accounting 1 course as more relevant than the Module Two and Three student.

Word Information processing 1. The Secretarial Studies students and the graduates rated the Word Information Processing course as very important and very relevant. For both importance and relevance, the results of the ANOVA revealed there was no statistical significant difference among the modules/graduates ($F_{2,98} = 0.502$; nsd; Tables 31; & $F_{2,98} = 2.098$; nsd; Table 31, Appendix J).

Seminar. The Module Three students and graduates rated the seminar course as not important and not relevant. The results of the ANOVA/Bonferroni analyses revealed that, for importance, the Module Three students ratings were significantly higher than the graduates ($F_{1,164} = 16.248$; $p < 0.01$; Table 31, Appendix J), while for relevance, the Module Three students possessed a significantly higher views about the relevant of the seminar than the graduates ($F_{1,164} = 32.378$; $p < 0.01$; Table 31, Appendix J).

During the focus group interviews, the students confirmed the importance and relevance of the Educational Administration, Research Methods 2, Small Business 2, Financial Accounting 1, and Word Information Processing 1 course. For example, the Module Two and Three students indicated that the Educational Administration course was important and relevant because the skills they learn enable them to take on administrative responsibilities in their schools. It should be noted that the Education Officer who took part in the individual interview indicated that the B. Ed. Business Education graduates were invited to conduct workshops on administration and supervision for new teachers.

Again, the students expressed concerns over lack of adequate time for hands-on experience in the Research Methods 2 course and the need for revision of the Data Processing 2 course. Therefore, it is recommended that *(a) the B. Ed. program planners review the length of the B. Ed. program with a view to increasing it in order for the students to have more time to learn the knowledge and skills needed for conducting a research project, and, (b) revising the Data Processing 2 course to include content that* *will be related to what the graduates of the B. Ed. Business Education programs will teach in the high schools.*

Module Three Courses

In the case of Module Three, the Module Three students they were asked about the importance and relevance of Module Three courses they were presently in while the graduates were asked the importance and relevance of courses they had completed. The item means and standard deviations are reported in Table 32.

Curriculum Development. As shown in Table 32, the Module Three students and the graduates rated the Curriculum Development course as important and very relevant. The results of the ANOVA analysis revealed that there was no statistical significant difference between Module Three students and graduates ($F_{1,164} = 0.909$; nsd Table 32 & $F_{1,164} = 0.362$; nsd; Table 32, Appendix J).

Educational Measurement. Both the Module Three students and the graduates rated the Educational Measurement course as important and relevant. The results of the ANOVA analyses revealed there was no statistical significant difference between Module Three students and graduates ($F_{1,164} = 1.242$; nsd; Table 32 & $F_{1,164} = 0.313$; nsd; Table 32, Appendix J).

Human Relations. Both the Module Three students and the graduates rated the Human Relations course as important and relevant. Again, the results of the ANOVA analyses revealed that there was no statistical significant difference between Module Three students and graduates ($F_{1,164} = 1.109$; nsd; Table 32 & $F_{1,164} = 0.136$; nsd; Table 32, Appendix J).

Table 32

Item Mean and Standard Deviation of Students and Graduates: Importance and Relevance of Module Three Courses

Course	Group	Special.	n	Importance		Relevance	
				$\overline{X}$	SD	$\overline{X}$	SD
Curricul. Develop.	Mod.3	Bus.	24	3.50	0.59	3.08	0.97
		Sec.	20	3.40	0.68	3.55	0.69
	Grads.	Bus.	60	3.28	0.69	3.23	0.53
		Sec.	64	3.41	0.56	3.27	0.54
Educ. Measem.	Mod.3	Bus.	24	3.79	0.42	3.33	1.05
		Sec.	20	3.40	0.82	3.60	0.68
	Grads.	Bus.	60	3.42	0.65	3.35	0.52
		Sec.	64	3.53	0.59	3.45	0.59
Human Relations	Mod.3	Bus.	24	3.79	0.42	3.29	1.08
		Sec.	20	3.40	0.82	3.65	0.59
	Grads.	Bus.	60	3.43	0.56	3.48	0.50
		Sec.	64	3.55	0.53	3.38	0.55
Caribbean Economy	Mod.3	Bus.	24	3.13	0.61	3.17	0.38
	Grads.	Bus.	60	3.07	0.69	2.92	0.56
Financial Account. 2	Mod.3	Bus.	24	3.54	0.59	3.50	0.59
	Grads.	Bus.	60	3.35	0.48	3.38	0.52
Word Inform. Processing 2	Mod.3	Sec.	20	3.70	0.47	3.80	0.41
	Grads.	Sec.	64	3.59	0.53	3.64	0.52

1 = Not very important, 2 = Not important, 3 = Important, and 4 = Very important
1 = Not very relevant, 2 = Not relevant, 3 = Relevant, and 4 = Very relevant

Caribbean Economy. Again, both the Module Three Business Studies students and the graduates rated Caribbean Economy course between important and very important and relevant. The results of the ANOVA analyses revealed that there was no significant difference between the two groups ($F_{1,83} = 0.132$; nsd; Table 32, Appendix J), while for relevance, there was a significant difference between the Module Three Business Students and the graduates ($F_{1,83} = 4.009$; Table 32, Appendix J).

Financial Accounting 2. The Business Studies Module Three students and the graduates rated the Financial Accounting 2 course between important and very important and between relevant and very relevant. There was no statistical significant difference between the Module Three Business students and the graduates ($F_{1,83} = 2.390$; nsd Table 32; & $F_{1,83} = 0.791$; nsd; Table 32, Appendix J).

Word Information Processing 2. Likewise, the Secretarial Studies students and the graduates rated the Word Information Processing 2 course between important and very important and between relevant and very relevant, and again, there was no statistical significant difference between the Module Three Secretarial students and the graduates ($F_{1,83} = 0.652$; nsd; Table 32; & $F_{1,83} = 1.592$; nsd; Table 32, Appendix J).

During the focus group discussions, the Module Three students indicated that Curriculum Development, Educational Measurement, Human Relations, Caribbean Economy, Financial Accounting 2, and Word Information Processing 2 courses were important and relevant to them because they use the knowledge and skills in their teaching jobs. However, the students expressed a concern about the lack of Caribbean Economy textbooks in the library. When asked, the Librarian indicated that some efforts were being made to purchase more textbooks for this course. However, the B. Ed. Program Coordinator indicated that students were required to buy their own textbooks with the book allowance provided to them. Therefore, it is recommended that *the*

Librarian review the book collection for the Caribbean Economy course with a view to increasing it for the students to have more textbooks for this course.

Quality of Instruction

Evaluation Question 16: What is the quality of instruction in the B. Ed. Business Studies and Secretarial Studies programs?

To clarify the quality of instruction in the B. Ed. Business and Secretarial Studies programs, two components were examined. These were the quality of instruction and the adequacy of instructors' consultations with students.

Quality of instruction. Three aspects of instruction were considered. These were quality of teaching style (nine 4-point Likert type items; internal consistencies of 0.75 for students and 0.90 for graduates); appropriateness of teaching methods (four 4-point Likert type items; internal consistencies of 0.69 for students and 0.83 for graduates); and level of instruction (too difficult, too easy; one 4-point Likert type item). The item means and standard deviations for the two sub-scales and single item are reported in Table 33.

As shown in Table 33, there was a general but strong agreement that the quality of teaching was adequate. The results of the ANOVA/Bonferroni analyses revealed that the Modules Two and Three students rated quality of teaching style slightly lower than the graduates ($F_{3,234} = 4.750$; $p < 0.01$; Table 33, Appendix J). However, the students and graduates rated the appropriateness of the teaching methods used by the instructors somewhat poorly ($F_{3,234} = 0.712$; nsd; Table 33, Appendix J). Lastly, the three student groups and graduates generally found level of instruction appropriate ($F_{3,234} = 1.135$; nsd; Table 33, Appendix J).

Table 33

Item Mean and Standard Deviation of Students and Graduates: Quality of Teaching Style, Appropriateness of Teaching Methods, and Level of Instruction

			Quality of Teaching Style		Appropriateness of Teaching Method		Level of Instruction	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	2.93	0.30	2.34	0.32	2.90	0.45
	Sec.	15	2.82	0.32	2.12	0.21	2.87	0.52
Mod.2	Bus.	24	2.80	0.40	2.12	0.63	2.75	0.90
	Sec.	15	2.76	0.25	2.15	0.46	2.93	0.46
Mod.3	Bus.	24	2.84	0.30	2.20	0.51	3.00	0.51
	Sec.	20	2.78	0.42	2.31	0.56	2.95	0.22
Grad.	Bus.	60	3.06	0.55	2.03	0.74	2.85	0.86
	Sec.	64	3.04	0.63	2.19	0.77	2.63	0.98

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

The information provided by the students in their focus group discussions and the observations made by the evaluator and research assistant are congruent with the survey results. For example, the students in the focus group discussions indicated that some instructors failed to stimulate and maintain their interests and that some instructors were not receptive to their questions. There was general agreement that while the level of instruction was appropriate across the modules, the there was a lack of variety in the teaching approaches employed by the instructors and that some of the approaches were not appropriate for the particular content to be learned. Each of these points was observed during the interviews.

The comments made by the instructors did not agree with these findings. They indicated that they stimulated their students, were receptive to questions, and that they used a variety of teaching approaches that were appropriate and "convenient."

The B. Ed. Program Coordinator explained that the apparent lack of receptivity to questions by the instructors reported by the students was likely due to the lack of adequate time given "the limited time for instruction". She added that while the variety of teaching methods employed by the instructors was, perhaps, limited, she did point out that some of the methods used were pertinent to what was to be learned.

In summary, the quality of instruction is not high, at least in terms of the aspects considered here. In agreement with the recommendation that the courses be evaluated by outside experts with expertise in the course content, it is recommended that *a formal instructor evaluation system be put in place. This system should include both an evaluation by students and a peer evaluation.*

Adequacy of instructors' consultations with students. The adequacy of the consultations provided to students by the instructors was examined by looking at the number of hours made available for consultations and whether or not the instructors were available during the sessions. The item means and standard deviations for each of these attributes are reported in Table 34.

As shown in Table 34, there was a general but strong disagreement among the students that the instructors' consultations with students was adequate, while the graduates agreed that the consultation period was adequate. These findings were confirmed by the ANOVA/Bonferroni analyses which revealed that the graduates were significantly higher in the rating than did the students ($F_{3,234} = 60.319$; $p < 0.01$; Table 34, Appendix J).

The Modules One and Two students and the graduates indicated that the instructors were available during consultation sessions while the Module Three students tended to indicate that the instructors were not available. There was no significant difference among the three student groups and the graduates ($F_{3,234} = 0.643$; nsd; $p < 0.01$; Table 34, Appendix J).

Table 34
Item Mean and Standard Deviation of Students and Graduates: Adequacy of Consultations and Availability of Instructors for Consultations

			Adequacy of Consultation Period		Availability of Instructors for Consultations	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	1.90	0.64	2.15	0.67
	Sec.	15	2.07	0.46	2.00	0.53
Mod.2	Bus.	24	1.96	0.75	2.21	0.83
	Sec.	15	2.07	0.59	2.07	0.80
Mod.3	Bus.	24	2.04	0.55	2.25	0.61
	Sec.	20	1.90	0.64	2.25	0.64
Grad.	Bus.	60	3.22	0.78	2.07	0.90
	Sec.	64	3.25	0.80	2.06	0.81

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

The above findings are supported by the comments made by the students who took part in the focus group discussions. While the Module One students did not comment on the number of office hours, the Module Two and Three students indicated that the number of consulting periods with the instructors was not adequate, and that some of the instructors were not available during posted consultation hours.

In contrast to these findings, the instructors indicated in their surveys that they were available for consultations with the students. The instructors indicated that this was because of teaching and evaluating of the students in a "short" summer season. However, some of the instructors did agree that the number of office hours was not adequate. This view was also expressed by the B. Ed. Program Coordinator, who indicated that some of the part-time instructors were not always available for consultation with their students due to the lack of an office space for them. She added that the full-time instructors were often occupied with other university duties and, hence, could not meet often with their students. Based on these findings, it is recommended that *the B. Ed. program administrators (a) ensure that the part-time instructors are provided with office space where consultations can take place with their students, and (b) review the number of consulting hours for the instructors and the students with a view of increasing the number.*

Instructors. With the exception of two of the 18 instructors who participated in the study, the instructors indicated that their workloads were heavy. During the summer component, the instructors teach a minimum of 10 hours per week. In addition to the class contact time, the instructors indicated that they spent an "average of about 10 hours per week" preparing their lesson plans and notes, grading assignments, and supervising student projects. At the same time, 11 of the instructors reported that they were involved in their own academic work either doing research as part of their own graduate degree requirements (n = 5) or in professional writing (n = 6). They indicated that they spent an average of six hours per day on these activities.

To determine the currency of the instructors' knowledge, they were asked if they received any academic journals. Of the 18 instructors, 14 reported that they did. The remaining four instructors indicated that they did not receive or read professional or research journals.

All 18 instructors reported that they were evaluated by their students at the end of the course. However, while 12 of the instructors felt comfortable with these evaluations and pointed out they were useful to them, six indicated otherwise. Given the university status of UTECH, the senior administration and the administrators of the Business Studies and Secretarial Studies programs *need (a) to encourage their staff to remain current in their field by becoming involved in research and professional writing, and (b) to work with the faculty to integrate the student evaluation information into the faculty members' instructional planning and teaching.*

When asked, 10 of the 18 instructors felt the rate of pay was not sufficient for the amount of work they needed to do, and asked that a review of the pay scale be performed.

Quality of Student Evaluation Procedures

Evaluation Question 17: What is the quality of the procedures followed to evaluate students in the B. Ed. Business Studies and Secretarial Studies programs?

Four components were examined to evaluate the quality of evaluation of students in the B. Ed. Business Studies and Secretarial Studies. These were assessment methods, assignments and examinations administered to the students, grading system, and adequacy of the evaluation feedback.

Assessment Methods

According to the B. Ed. Handbook (1998-1999), the course work for students in the Business and Secretarial Studies programs consisted of at least two written assignments for each course. All assignments should be completed and graded before the final examinations of the summer component. The final grade in all courses is an average of the final examination and the course work. When asked, the B. Ed. Program Coordinator indicated that to be awarded a pass in any course, students must attain a minimum of 50.0% in the course work and 50.0% in the final examinations. She added that to be awarded a pass in the research project and the seminars, students must attain at least a 50.0% mark.

Discussions on assessment methods. The students and the graduates were asked if the instructors discussed the assessment procedures with the students. The item means and standard deviations are reported in Table 35. As shown, the Module Three students tended to agree that the instructors discussed the assessment procedures with the students while the Module One students were somewhat uncertain and the Module Two students and the graduates tended to disagree. The results of the ANOVA/Bonferroni analyses revealed that that the Module Three students were significantly higher in their ratings than the Module Two students and the graduates ($F_{3,234} = 7.518$; $p < 0.01$; Table 35 Appendix J).

Table 35
Item Mean and Standard Deviation of Students and Graduates: Discussions on Assessment Methods

			Discussions on Assessment Methods	
Group	Specialization	n	$\overline{X}$	*SD*
Module 1	Business	20	2.60	0.94
	Secretarial	15	2.53	1.06
Module 2	Business	24	2.21	0.83
	Secretarial	15	2.13	0.83
Module 3	Business	24	2.92	0.88
	Secretarial	20	2.90	0.64
Graduate	Business	60	2.17	0.96
	Secretarial	64	2.19	1.05

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

During the focus group discussions, some students in the three modules indicated that a few instructors discussed the methods of assessment to be used with the students, while other students disagreed and added that they would like all the instructors to discuss the methods of assessment with their students. The B. Ed. Program Coordinator pointed out that presently there was no requirement that the instructors should discuss their methods of assessments with their students. To ensure that all students know what is expected of them and how it is to be assessed, it is recommended that *the course outline for each course contain not only the objectives or expected learning outcomes for the course but also the assessment methods to be used to collect the evidence needed to determine if the students have acquired the knowledge and skills to be learned.*

Types of assessment methods. On the issue of the use of varieties of assessment procedures, 83.3% of the Module Two Business Studies students, 66.7 % of the Module Three Business Studies students, 68.3% of the Business Studies graduates, 80.0% of students Module Two Secretarial Studies students, 60.0% of the Module Three Secretarial Studies students, 62.5 % of the Secretarial Studies graduates indicated that the instructors did not use a variety of assessment methods.

The statistical results were congruent with what the students said during the focus group discussions. There was agreement among the students that some instructors did not use a variety of assessment methods; emphases were upon in-class testing and the final examinations.

In contrast, all 18 instructors disagreed. They indicated that they used a variety of assessment methods, including take-home assignments, in-class tests, group projects, and final examinations. They pointed out that they used this variety to offer a more comprehensive set of assessment results upon which to base their evaluations.

It was indicated earlier that some of the instructors possessed professional degrees. The Dean, Faculty of Education and Liberal Studies indicated that for such full-time instructors, a post-diploma teacher training program was offered by her faculty. However, it should be noted that most of the instructors who taught in the B. Ed. programs were on part-time employment. The services offered to full-time faculty were not offered to the part-time instructors. Given this, it is understandable what the students indicated: the different assessment methods used are limited. Therefore, it is recommended that *the program administrators of the B. Ed. programs should organize a* *workshop on assessment techniques for all instructors of the B. Ed. without an education degree.*

Assignments and Examinations

Assignments. The evaluation of assignments provided by the instructors to the students was assessed by four 4-point Likert type items. The item means and standard deviations for this set of items are reported in Table 36.

Table 36
Item Mean and Standard Deviation of Students and Graduates: Assignments

Group	Specialization	n	Assignments $\overline{X}$	Assignments *SD*
Module 1	Business	20	2.69	0.21
	Secretarial	15	2.90	0.30
Module 2	Business	24	3.02	0.28
	Secretarial	15	2.98	0.36
Module 3	Business	24	3.22	0.43
	Secretarial	20	2.93	0.39
Graduate	Business	60	2.92	0.49
	Secretarial	64	3.08	0.45

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

As shown in Table 36, the Module Two and Three students and the graduates appear to have a more positive view about the assignments given by the instructors in the B. Ed. Business Education programs than the Module One students. The results of the ANOVA/Bonferroni analyses revealed that the Module Three students and the graduates possessed a significantly more positive view about the assignments than the Module One students ($F_{3,234} = 3.151$; $p < 0.01$; Table 36, Appendix J).

workshop on assessment techniques for all instructors of the B. Ed. without an education degree.

Assignments and Examinations

Assignments. The evaluation of assignments provided by the instructors to the students was assessed by four 4-point Likert type items. The item means and standard deviations for this set of items are reported in Table 36.

Table 36
Item Mean and Standard Deviation of Students and Graduates: Assignments

Group	Specialization	n	Assignments	
			$\bar{X}$	*SD*
Module 1	Business	20	2.69	0.21
	Secretarial	15	2.90	0.30
Module 2	Business	24	3.02	0.28
	Secretarial	15	2.98	0.36
Module 3	Business	24	3.22	0.43
	Secretarial	20	2.93	0.39
Graduate	Business	60	2.92	0.49
	Secretarial	64	3.08	0.45

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

As shown in Table 36, the Module Two and Three students and the graduates appear to have a more positive view about the assignments given by the instructors in the B. Ed. Business Education programs than the Module One students. The results of the ANOVA/Bonferroni analyses revealed that the Module Three students and the graduates possessed a significantly more positive view about the assignments than the Module One students ($F_{3,234} = 3.151$; $p < 0.01$; Table 36, Appendix J).

The students in the focus group discussions all agreed that their assignments helped them but they expressed a concern regarding the number of assignments given the available time to complete them. This was confirmed by the B. Ed. Program Coordinator who agreed that most times the students were occupied with their assignments. Therefore, it is recommended that *the program administrators review the length of program with a view of increasing the time to allow students the adequate time to complete the assignments required for the two B. Ed. Business Education programs.*

Examinations. Four aspects of the examination program were assessed in the evaluation of examinations administered to the students. These were the examination schedule, the content assessed, the item wording and format, and the examination condition. The Module One students were not included since they had not taken any final examination.

Examination schedule. The Module Two and Three students and the graduates were asked if the examination schedule allowed them adequate time to prepare for their examinations. They were asked if there was sufficient time (a) between the end of the courses and the beginning of final examinations, and (b) between consecutive examinations. The item means and standard deviations for these two questions are reported in Table 37.

Table 37

Item Mean and Standard Deviation of Students and Graduates: Examination Schedule

			Examination Schedule	
Group	Specialization	n	$\overline{X}$	*SD*
Module 2	Business	24	1.67	0.82
	Secretarial	15	1.73	0.88
Module 3	Business	24	1.33	0.48
	Secretarial	20	1.60	0.75
Graduate	Business	60	1.73	0.94
	Secretarial	64	1.97	1.04

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

As shown, the Module Two and Three students and the graduates indicated that the time between the end of the courses and the start of the examinations was not sufficient to allow them to prepare adequately for the examination. The results of the ANOVA/Bonferroni analyses revealed that the graduates were significantly higher in their ratings than the Module Three students ($F_{2,201} = 3.005$; $p < 0.01$; Table 37, Appendix J).

During the focus group discussions, the Modules Two and Three students indicated that they would like to be given a week to study before the beginning of their examinations. The B. Ed. Program Coordinator agreed with the students' concerns about the time between the courses and examinations and added that the faculty was looking at ways of providing a study break before the final examination week. With respect to the second concern, the B. Ed. Program Coordinator pointed out that while the intent was to have each student write only one examination per day, exceptions did occur when a student had to redo an examination. It is recommended that *the B. Ed. Program Coordinator work with the faculty to include a one-week study break prior to the beginning of the final examination.*

Content assessed. The Modules Two and Three students and graduates tended to agree that the content assessed in the examinations reflected the content covered during instruction (see Table 38). The results of the ANOVA analysis revealed that there were no statistical significant differences among the two student groups and the graduates ($F_{2,201} = 0.315$; nsd; Table 38, Appendix J).

Table 38
Item Mean and Standard Deviation of Students and Graduates: Content Assessed

			Content Assessed	
Group	Specialization	n	$\overline{X}$	*SD*
Module 2	Business	24	3.13	0.45
	Secretarial	15	3.13	0.64
Module 3	Business	24	3.21	0.42
	Secretarial	20	3.20	0.41
Graduate	Business	60	3.08	0.81
	Secretarial	64	3.13	0.86

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

In contrast, during the focus group discussions the students indicated that some of the instructors did assess material on the final examinations that was not covered in class. Although not stated, it seems likely that the instructors of these courses were not able to cover all of what they intended to during instruction and did not alter their final examinations accordingly.

Item wording and format. To assess the quality of the examination papers, two questions were asked. The students in Modules Two and Three and the graduates were asked if the examination papers were worded clearly and if the examination papers contained a good mixture of selected and constructed response items. As shown in Table 39, the students were less certain than the graduates about the clarity of wording. The results of the ANOVA/Bonferroni analyses revealed that the graduates were significantly higher in their ratings than the Module Three students ($F_{2,201} = 6.095$; $p < 0.01$; Table 39, Appendix J).

Table 39
Item Mean and Standard Deviation of Students and Graduates: Item Wording and Item Format

			Item Wording		Item Format	
Group	Spec.	n	$\bar{X}$	*SD*	$\bar{X}$	*SD*
Mod.2	Bus.	24	3.00	0.59	3.00	0.66
	Sec.	15	2.93	0.59	3.07	0.59
Mod.3	Bus.	24	2.79	0.51	2.58	0.72
	Sec.	20	2.65	0.49	2.60	0.68
Grad.	Bus.	60	3.18	0.65	2.87	0.83
	Sec.	64	3.08	0.82	2.84	0.84

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

With regards to the second question, the students in Module Two and the graduates agreed that the examination papers contained a good mixture of selected and constructed response items; the Module Three students were somewhat uncertain (see Table 39; column 5). The results of the ANOVA/Bonferroni analyses revealed that the

Module Two students were significantly higher in their ratings than the Module Three students ($F_{2,201} = 3.394$; $p < 0.01$; Table 39, Appendix J).

During the focus group discussions, the Module Two and Module Three students did not offer any comments about the format other than that a variety of formats was used. They did, however, point out there were typing errors in many of the examination papers. These errors in turn led to incorrect responses on the part of the students. The B. Ed. Coordinator indicated that, since all the papers were submitted to a central typing pool for typing and duplicating, and since the instructors did not always proof their examinations following typing, it was possible for errors to be made. She then added that when an error was detected during the administration of an examination, the invigilator of the examination, who was not the instructor, would contact the instructor to confirm the correction needed and then either tell the students either verbally or by writing the correction on the chalkboard. The B. Ed. Coordinator concluded that there were very few occasions were errors had been detected.

Examination conditions. The students in Modules Two and Three and the graduates were asked if the examination condition was comfortable. The item means and standard deviations are reported in Table 40. As shown, both the students and the graduates disagreed that the examinations conditions were comfortable. There were no statistical significant differences among the two student groups and the graduates ($F_{2,201} = 2.185$; nsd; Table 40, Appendix J).

Table 40

Item Mean and Standard Deviation of Students and Graduates: Examination Conditions

			Examination Conditions	
Group	Specialization	n	$\overline{X}$	*SD*
Module 2	Business	24	2.08	0.88
	Secretarial	15	2.13	0.92
Module 3	Business	24	1.79	0.59
	Secretarial	20	2.00	0.92
Graduate	Business	60	2.20	1.12
	Secretarial	64	2.31	1.05

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

The main complaint expressed by the Module Two and Module Three students during the focus group discussions were that the classrooms were hot and/or noisy during the examinations. To ensure that the classrooms are comfortable, *the B. Ed. Program Coordinator should work with the maintenance unit of the university in (a) seeing that the fans in the classrooms are functioning, and (b) ensuring that noise level around the classrooms are kept low during the examination period.*

Grading System

The grading system used for grading all students at UTECH is summarized in Table 41. First, all final scores for a student are converted to percentages. These are then transformed into letter grades on a 9-point letter grade scale as shown in the two left most columns of Table 41 or to a numerical grade as shown in the first and fourth columns of this table. Performance descriptors are also assigned as shown in third column. As pointed out earlier, the B. Ed. Program Coordinator pointed out that to receive at least a passing grade in a course, a student must attain a minimum of 50% on both the in-class assessments and final examination for that course.

Table 41
UTECH Grading System

Percentage Scale	Grade	Performance Description	Grade Value	Equivalent U.S Point System
80 -100	A	Excellent	4.0	A = 4
75 - 79	A -	Excellent	3.7	A = 4
70 - 74	B+	Above Average	3.4	B = 3
65 - 69	B	Above Average	3.0	B = 3
60 - 64	C+	Average	2.5	C = 2
55 - 59	C	Average	2.0	C = 2
50 - 54	C-	Below Average	1.6	C = 2
40 - 49	D	Marginal Fail (Resit)	0.8	D = 1
0 - 39	U	Unsatisfactory	0.0	D = 1

Adapted from B. Ed. Handbook (1998-1999, p. 10)

Adequacy of grading system. The students in all three modules and the graduates were asked if they felt the grading system was adequate. The item means and standard deviations are reported in Table 42. As shown, the Module One and Module Three students and the graduates agreed that the grading system used in the B. Ed. programs was adequate, while the Module Two students tended to disagree.

Table 42
Item Mean and Standard Deviation of Students and Graduates: Adequacy of the Grading System

			Adequacy of Grading System	
Group	Specialization	n	$\overline{X}$	*SD*
Module 1	Business	20	3.10	0.79
	Secretarial	15	3.13	0.35
Module 2	Business	24	2.80	0.88
	Secretarial	15	2.13	0.64
Module 3	Business	24	2.96	0.81
	Secretarial	20	3.05	0.95
Graduate	Business	60	2.48	1.00
	Secretarial	64	2.67	1.02

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

The results of the ANOVA/Bonferroni analyses revealed that the Module Two students were significantly lower in their ratings than the Module One and Module Three students and the graduates ($F_{3,234} = 9.804$; $p < 0.01$; Table 42, Appendix J).

Quality of Feedback

Two components were examined to evaluate the quality and adequacy of feedback given to the B. Ed. Business Studies and Secretarial Studies students. These were how immediate the instructors provided the students feedback following an assessment and if the faculty always kept the students informed about their academic progress after each summer component.

Instructors' feedback. The three groups of students and the graduates indicated strongly that the instructors did not provide immediate feedback following an assessment.

The item means and item standard deviations are reported in Table 43. The results of the ANOVA analysis revealed that there were no statistical significant differences among the two student groups and the graduates ($F_{3,234} = 1.527$; nsd; Table 43, Appendix J).

Table 43
Item Mean and Standard Deviation of Students and Graduates: Adequacy of Instructors' Feedback and Quality of Progress Report

			Adequacy of Instructors' Feedback		Quality of Progress Report	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	2.00	0.92	-	-
	Sec.	15	1.80	0.86	-	-
Mod.2	Bus.	24	1.92	0.88	2.25	0.42
	Sec.	15	1.60	0.63	2.27	0.46
Mod.3	Bus.	24	2.25	0.79	2.04	0.69
	Sec.	20	2.10	0.79	1.78	0.55
Grad.	Bus.	60	1.97	1.04	2.45	0.65
	Sec.	64	2.13	1.05	2.49	0.77

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

With regards to the second item, the students in Modules Two and Three tended to agree that the faculty did not always keep them informed about their academic performance; the graduates were uncertain (see Table 43). The results of the ANOVA/Bonferroni analyses revealed that the graduates were significantly higher in their ratings than the Module Three students ($F_{2,201} = 11.924$; $p < 0.01$; Table 43, Appendix J).

The statistical results were congruent with what the students said during the focus group discussions. There was an agreement among the students that some of the instructors did not provide immediate feedback following an assessment and that the faculty was late in communicating their academic progress to them. The students indicated that the late arrival of these grades was responsible for their inadequate preparation for the examinations that they failed. The students expressed a concern about misplacement of their assignments by the instructors.

When asked, the B. Ed. Program Coordinator agreed that sometimes the grades reports were mailed late to the students. She offered two reasons. First, she stated that the postal system in Jamaica was not very effective. Secondly, she stated that a few of the instructors with large student groups were late in submitting their grades which in turn led to delays in mailing the grades to the students. She quickly added that this delay was understandable given the large number of examinations to be marked in the large classes. On the issue of misplacement of students papers, the B. Ed. Program Coordinator indicated that she was aware of only a case. However, evidence was not provided to support this claim. The delay in providing students with feedback and grades, and misplacement of assessments need to be avoided. It is therefore recommended that *the Faculty of Education and Liberal Studies (a) ensure that students receive their progress reports on time, and (b) ensure that students' papers are carefully stored to avoid misplacement.*

Quality and Adequacy of Resources

Evaluation Question 18: What are the quality and adequacy of resources provided to students and instructors in the B. Ed. Business Studies and Secretarial Studies programs?

To examine the quality and adequacy of resources provided to students and instructors in the Business Studies and Secretarial Studies programs, three components were examined. These were teaching materials, facilities, and student services.

Teaching Materials

To assess the quality and adequacy of teaching materials the students, graduates, and instructors were asked four questions in their surveys. The first item assessed the quality of teaching materials and the other two items assessed the adequacy of the teaching materials. The fourth item dealt with the degree to which the support provided by the non-academic staff was helpful.

Quality of teaching materials. As shown in Table 44 (column 4), the graduates appear to have a positive view of the quality of teaching materials. The students, particularly the Module Two students, were less certain. The results of the ANOVA/Bonferroni analyses revealed that the graduates were significantly higher in their ratings than the students in Module Two ($F_{3,234} = 10.420$; $p < 0.01$; Table 44, Appendix J).

During the focus group discussions, most of the students agreed that the quality of teaching materials was not adequate. This view was also shared by the instructors in their written comments; the B. Ed. Program Coordinator did not respond.

Table 44

Item Mean and Standard Deviation of Students and Graduates: Quality and Adequacy of Teaching Materials, and Personnel

			Quality of Teaching Materials		Adequacy of Teaching Materials		Quality of Support Personnel	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	2.35	0.81	2.25	0.85	2.66	0.64
	Sec.	15	2.67	0.62	2.44	0.53	2.66	0.66
Mod.2	Bus.	24	2.13	0.74	2.21	0.68	2.29	0.62
	Sec.	15	2.20	0.56	2.23	0.59	2.65	0.96
Mod.3	Bus.	24	2.67	0.82	2.69	0.86	2.77	0.40
	Sec.	20	2.30	0.66	2.33	0.73	2.70	0.54
Grad.	Bus.	60	3.10	0.92	2.49	0.92	2.91	0.58
	Sec.	64	2.83	0.99	2.48	0.95	2.91	0.65

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

Adequacy of teaching materials. The students and graduates were asked to provide their perceptions about the adequacy of teaching materials in the B. Ed. Business Education programs. The internal consistency for the set of two items was 0.76 for the students and 0.82 for the graduates. As indicated previously in the input evaluation chapter, all groups rated the adequacy of the teaching materials poorly. These observations appear to be supported the students and the graduates who expressed a less positive view about the adequacy of the teaching materials (see Table 44, column 5). The results of the ANOVA analysis revealed that there was no statistical significant difference among the three student groups and the graduates ($F_{3,234}$ = 1.169; nsd; Table 44, Appendix J).

During their focus group discussions, the students indicated that the number of teaching materials was not adequate. This view was also shared by the instructors. The B. Ed. Program Coordinator agreed that there was shortage of materials and equipment for both B. Ed. programs. As earlier reported in the input evaluation chapter, the review of teaching materials provided by the Faculty of Education and Liberal Studies revealed that there is a shortage of materials and equipment for the B. Ed. programs. Thus, it is recommended that *the teaching materials and equipment be provided to a level commensurate with the needs of students and instructors.*

Quality of support personnel. Closely related to the provision of adequate teaching materials and equipment is the quality of support provided by the non-academic staff. Seven questions were asked. These questions dealt with how pleasant and helpful the lab assistants, the B. Ed. degree secretarial staff, and the library staff were to students, and if the administrative staff of the B. Ed. programs cared about students welfare. The internal consistency for the set of seven items was 0.90 for the students and 0.78 for the graduates.

As shown in Table 44 (column 6), the students appear to be less certain about the quality of non-academic staff than the graduates. The results of the ANOVA/Bonferroni analyses revealed that the graduates rated the quality of non-academic staff higher than the Module Two students ($F_{3,234} = 5.356$; $p < 0.01$; Table 44, Appendix J).

In contrast to the survey results, the students in the focus group discussions, indicated that the lab assistants, the B. Ed. secretarial staff, and the library staff were helpful and pleasant. This view was also expressed by the instructors in their written comments of the surveys. It is not clear why the survey results were not more positive that what they were.

Facilities

The adequacy of facilities for the B. Ed. Business and Secretarial Studies programs was examined by asking the students and graduates to provide their perceptions about the adequacy of the library, the classrooms, the computer labs, the B. Ed. degree office in the Faculty of Education and Liberal Studies, and the hostel accommodation.

Adequacy of Library

To clarify the adequacy of the library used by the students and the instructors in the B. Ed. Business Education programs, four components were assessed. These were the availability and adequacy of books and periodicals, the adequacy of the library reading space and study area, the adequacy of the library lending polices, and the adequacy of the library hours of operation. The analyses of these items, which were conducted, are presented below.

Availability of books and periodicals. The students and graduates were asked to provide their perceptions about the availability of books and periodicals in the library. The item means and item standard deviations for this item are presented in Table 45 (column 4). As shown, the Module One students and the graduates agreed that books and periodicals were available for their use while the Module Two students disagreed and the Module Three students were uncertain. The results of the ANOVA/Bonferroni analyses revealed that the Module One students and the graduates possessed a significantly more positive view about the availability of books and periodicals than the Module Two and Module Three students ($F_{3,234} = 21.916$; $p < 0.01$; Table 45, Appendix J).

Table 45
Item Mean and Standard Deviation of Students and Graduates: Availability and Adequacy of Books and Periodicals

			Availability of Books & Journals		Adequacy of Number of Books & Journal	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	3.45	0.51	2.10	0.72
	Sec.	15	3.07	0.70	2.00	0.66
Mod.2	Bus.	24	2.00	0.66	2.04	0.69
	Sec.	15	2.13	0.74	2.07	0.80
Mod.3	Bus.	24	2.67	0.76	2.20	0.83
	Sec.	20	2.45	0.95	2.10	0.72
Grad.	Bus.	60	3.13	0.85	3.25	0.73
	Sec.	64	3.12	0.85	3.13	0.92

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

The Module Two and Three students who participated in the focus group discussions indicated that some of the books and periodicals that they needed were not always available for their use. In contrast, the Module One students indicated that while they had not yet used the library long enough, they found the books they needed.

The instructors, in their written responses, also indicated that books and periodicals were not always available for their use. When asked about the availability of the books and periodicals for students' and instructors' use, the B. Ed. Program Coordinator referred the evaluator to the Librarian. The Librarian confirmed that some of the books and periodicals were not always available because some of the students and the instructors who borrowed these materials failed to return them to the library. She attributed this behavior to the "weak return policy" the library had, and she indicated that the library was developing a "strong return policy." In order to encourage users of books and periodicals to return materials borrowed from the library a strong library policy is needed. It is therefore, recommended that *the senior administrators at UTECH and the Librarian develop and enforce a "return policy" to ensure that books and periodicals borrowed are returned by their users within a specified time frame.*

Adequacy of books and periodicals. As shown in Table 45 (column 4), only the graduates agreed that the number of books and periodicals were adequate. The results of the ANOVA/Bonferroni analyses revealed that the graduates were significantly different in their ratings than each of the three student groups. ($F_{3,234} = 38.514$; $p < 0.01$; Table 45, Appendix J). These results are likely attributed to the fact that students needed the books now.

The students who took part in the focus group discussions unanimously agreed that the number of books and periodicals in the library was not adequate for all the courses. When asked to provide an example, the Module Three students stated that there were few books for the Caribbean Economy course. As reported earlier in the input section, the review of library holdings and the interviews with staff revealed that the collection of books and journals for the students and staff in the B. Ed. Business Studies and Secretarial Studies programs was insufficient (see pp. 121-122). Despite the positive views of the graduates, it is recommended that *the number of books and periodicals for the courses offered in the B. Ed. Business Studies and Secretarial Studies programs be increased in order to ensure that there is an adequate coverage and number for the students and their instructors to use.*

Library reading and study space. The students and graduates were asked to provide their perceptions about the adequacy of the reading and study space in the library. As shown in Table 46 (column 4), there was a general perception by the students and graduates that the space provided in the library was inadequate for reading, while the results of the ANOVA/Bonferroni analyses revealed that the graduates and the Module Two students were significantly higher in their ratings than the Module Three students, ($F_{3,234} = 7.684$; $p < 0.01$; Table 46, Appendix J).

Table 46
Item Mean and Standard Deviation of Students and Graduates: Adequacy of Library Reading and Study Space, and Lending Polices

			Adequacy of Library Space		Adequacy of Library Lending Policies		Library Operating Hours	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	2.20	0.52	3.10	0.72	3.15	0.81
	Sec.	15	1.67	0.49	3.20	0.41	2.80	0.86
Mod.2	Bus.	24	2.29	1.00	2.96	0.81	3.21	0.66
	Sec.	15	2.33	0.72	3.07	0.46	3.40	0.51
Mod.3	Bus.	24	1.83	1.05	2.83	0.64	3.29	0.69
	Sec.	20	1.50	0.51	2.75	0.85	2.85	0.81
Grad.	Bus.	60	2.25	0.68	3.22	0.64	2.25	1.00
	Sec.	64	2.14	0.61	2.97	0.89	2.38	1.05

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

During the focus group discussions, the students indicated that the reading space was small and as such most students could not be seated in the library. Further, they indicated that the library was hot and noisy. According to the Librarian, the library was being expanded to provide additional reading cubicles with fans and air conditions that will allow readers to study with less noise interference in a less warm environment.

Adequacy of library lending policies. The students and graduates were asked to rate the adequacy of the library lending polices. As shown in Table 46 (column 5), the three groups of students and the graduates found the library lending polices to be adequate. The results of the ANOVA analysis revealed that there was no statistical significant difference among the three student groups and the graduates ($F_{3,234} = 2.125$; nsd; Table 46, Appendix J).

According to the Librarian, the lending policies for the library included: (a) that books must be returned on or before that last date stamped on the date label, (b) that clients who were late in returning books may be deprived of borrowing privileges, (c) that reference books, periodicals, and special documents should not be removed from the library, and (d) that books may be renewed not more than twice after the first issue. She indicated that the library polices were bring reviewed. As indicated earlier, in order for the library to encourage clients to return materials borrowed from the library, a strong library policy is needed.

Adequacy of library hours of operation. The students generally agreed that the library operating hours were adequate. In contrast, as shown in Table 46 (column 5), the graduates disagreed. As confirmed by the results of the ANOVA/Bonferroni analyses, the graduates were significantly lower in their ratings than the three groups of students ($F_{3,234} = 16.850$; $p < 0.01$; Table 46, Appendix J).

However, all of the students who took part in the focus group discussions said that they would like the library operating hours extended as some of their lectures ended late in the evening. The review of the students timetables revealed that (a) the Module One students ended classes at 8:30 p.m. on Tuesdays and Thursdays and at 6. 00 p.m. on Mondays, Wednesdays and Fridays, (b) the Module Two students ended classes at 7:00 p.m. every week day, and (c) the Module Three students completed classes at 7:00 p.m. on Tuesdays and Thursdays and at 4 p.m. on Mondays and Wednesdays. The operating hours of the library were Monday to Friday 8:30 a.m. to 10:00 p.m., and Saturday 9:00 a.m. to 9:00 p.m. The Librarian indicated that the operating hours would be difficult to extend due to shortage of personnel staff in the library.

The intended schedule was to have students attend class in the mornings and afternoons, with a lunch break between. However, as shown by the class times just shown, this is not the case. The B. Ed. Program Coordinator explained that the instructors were allowed to change the lecture hours for their classes depending on the instructors' schedule and the students needs. For example, she indicated that the Module One students had late classes on Tuesdays and Thursdays because the instructor had a full-time job elsewhere and could only come in the evenings. Thus, it is recommended that *the B. Ed. Program Coordinator and the Librarian work out a timetable that would allow for expanded hours of the library during the summer component.*

Adequacy of Classrooms

To assess the adequacy of the classrooms used for the B. Ed. Business Education programs, the students and graduates were asked how comfortable the classrooms were and how clean the learning environment was.

Classroom comfort. As shown in Table 47 (column 4), the Module Two students and the graduates agreed that the classrooms were comfortable, while the Module One students and, particularly the Module students disagreed. This finding was confirmed by the results of the ANOVA/Bonferroni analyses, which revealed that the Module One students were significantly lower in their ratings than the Module Three students. The Module Two students were significantly higher in their ratings than the Module One and Module Three students. And the graduates were significantly higher in their ratings than the Module Three students ($F_{3,234} = 49.652$; $p < 0.01$; Table 47, Appendix J).

Table 47

Item Mean and Standard Deviation of Students and Graduates: Classroom Comfort and Clean Learning Environment

			Classroom Comfort		Clean Learning Environment	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	2.30	0.66	3.40	0.50
	Sec.	15	2.00	0.85	3.27	0.46
Mod.2	Bus.	24	3.00	0.72	3.21	0.59
	Sec.	15	3.00	0.66	3.07	0.59
Mod.3	Bus.	24	1.50	0.93	2.63	0.88
	Sec.	20	1.75	0.97	2.40	0.75
Grad.	Bus.	60	3.28	0.76	2.37	1.07
	Sec.	64	3.11	0.80	2.31	0.89

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

Despite the apparent differences found, the students in all the three modules who took part the focus group discussions indicated that the classrooms and lecture theatres were very hot and that the chairs and tables were not comfortable. These views were also expressed by the instructors in their written comments in their surveys. This view was shared by the B. Ed. Program Coordinator who indicated that in these classrooms the chairs were chained to the tables and that the students and instructors found the seats uncomfortable because of the restricted movement of the chairs.

Clean learning environment. When asked about the cleanliness of the learning environment, the Module One and Module Two students agreed that the classrooms were kept clean while the Module Three students and the graduates tended to be uncertain (see Table 47 column 5). The results of the ANOVA/Bonferroni analyses revealed that the Module One and Module Two students were significantly higher in their ratings than the Module Three students and the graduates ($F_{3,234} = 17.546$; $p < 0.01$; Table 47, Appendix J).

The Head of School of Vocational and Technical Education and the Head of the Department of Humanities and Liberal Studies agreed that some of the classrooms were not cleaned because the Department of Housing Services reduced the number of available cleaning support staff during the summer component. The B. Ed. Program Coordinator added that the few classrooms that were not clean were due to tardiness on the part of the cleaning staff. However, she indicated that efforts would be made to ensure that the classroom environment would be kept clean. Thus, it is recommended that *the B. Ed. program planners ensure that the Department of Housing Services increase the number of cleaning support staff to clean the classrooms during the summer component.*

Adequacy of Space within Faculty of Education and Liberal Studies

Closely related to the adequacy of classrooms is the adequacy of office and study spaces within the Faculty of Education and Liberal Studies. The students and graduates were asked if the B. Ed. degree office space was adequate and if they were provided with a study space within the faculty.

Adequacy of B. Ed. degree office. The students and graduates rated the B. Ed. office space as inadequate (see Table 48, column 4). The results of the ANOVA analysis revealed that there was no statistical significant difference among the three student groups and the graduates ($F_{3,234} = 2.309$; nsd; Table 48, Appendix J).

The students who participated in the focus group discussions said that the size of the B. Ed. office was small. They indicated that the small size of the office helps explain the poor records management in the B. Ed. office. The instructors in their written comments in their surveys, the B. Ed. Program Coordinator, and Head of School of Vocational and Technical Education also agreed that the office was small. While the

Table 48
Item Mean and Standard Deviation of Students and Graduates: Adequacy of B. Ed. Office and Reading Space

			Adequacy of B. Ed. Office Space		Adequacy of Reading Space	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	1.85	0.81	2.20	0.82
	Sec.	15	1.47	0.74	2.04	0.94
Mod.2	Bus.	24	2.21	0.83	2.09	0.59
	Sec.	15	2.07	0.70	2.10	0.57
Mod.3	Bus.	24	1.83	0.76	2.21	0.61
	Sec.	20	1.70	0.57	2.00	0.61
Grad.	Bus.	60	1.93	0.90	1.94	0.83
	Sec.	64	1.89	0.91	2.09	0.81

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

B. Ed. Program Coordinator indicated that there was limited space for expansion, the Head of School of Vocational and Technical Education indicated that in the future, the B. Ed. office might be relocated to a larger office space. Thus, for the B. Ed. office to adequately function, it is recommended that *the B. Ed. program administrators consider providing a larger office space.*

Adequacy of reading space. The students and graduates were asked if the reading space in the faculty of Education and Liberal Studies was adequate. As shown in Table 48 (column 5), the students and the graduates rated the reading space in the Faculty of Education and Liberal Studies as inadequate. The results of the ANOVA analysis revealed that there was no statistical significant difference among the three student groups and the graduates ($F_{3,234} = 0.288$; nsd; Table 48, Appendix J).

The students who took part in the focus group discussions indicated that there were no reading rooms for students in the Faculty of Education and Liberal Studies. When asked, the B. Ed. Program Coordinator agreed that the Faculty of Education and Liberal Studies did not provide reading spaces for the students after office hours. She indicated that for security reasons, the classrooms were locked at 4:30 p.m. This she said left the students with no reading areas. According to the Head of School of Vocational and Technical Education who also agreed that there were no study spaces for students in the Faculty of Education and Liberal Studies, indicated that efforts were being made to allocate a reading room to students.

Computers Labs

Three questions were asked to examine the adequacy of the computer labs available to the students in the B. Ed. Business Education programs. These were questions about the adequacy of the computers, availability of computers, and the adequacy of the hours of operation of the computer labs.

Adequacy of computers. The students and graduates were asked if the computers provided in the computer labs were up-to-date. As shown in Table 49 (column 4), the students and the graduates agreed that computers were up-to-date. The results of the ANOVA/Bonferroni analyses revealed that the graduates and the Module Two students were significantly different in their ratings than the Module Three students ($F_{3,234} = 10.315$; $p < 0.01$; Table 49, Appendix J).

Table 49
Item Mean and Standard Deviation of Students and Graduates: Adequacy and Availability of Computers, and Operating Hours

			Adequacy of Computers		Availability of Computers		Computer Lab Operating Hours	
Group	Spec.	n	$\overline{X}$	SD	$\overline{X}$	SD	$\overline{X}$	SD
Mod.1	Bus.	20	2.95	0.61	2.80	1.01	2.40	0.94
	Sec.	15	2.93	0.46	2.20	1.01	2.93	0.96
Mod.2	Bus.	24	3.17	0.64	2.17	0.76	2.92	0.65
	Sec.	15	3.20	0.56	2.40	0.83	2.87	0.64
Mod.3	Bus.	24	2.79	0.59	2.88	0.54	1.92	1.02
	Sec.	20	2.40	0.88	2.65	0.81	2.05	1.05
Grad.	Bus.	60	3.30	0.67	2.55	1.03	2.65	0.94
	Sec.	64	3.16	0.72	2.42	0.94	2.61	0.95

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

During the focus group discussions, the students indicated that some of the computers were up-to-date. The inspection of the two computer labs in the Faculty of Education and Liberal Studies by the evaluators revealed that half of the computers in the lab were old and were not functioning. It is therefore recommended that *the B. Ed. program administrators ensure that the computers provided in the labs are up-date-to date and in good working condition.*

Availability of computers. The students and graduates were asked if computers were available for their use. As shown in Table 49 (column 5), the three student groups and the graduates agreed that computers were available for their use. The results of the ANOVA analysis revealed that there was no statistical significant difference among the three student groups and the graduates ($F_{3,234} = 1.909$; nsd; Table 49, Appendix J).

In contrast, the students who took part in the focus group discussions indicated that most times the computers and printers were not available for their use. Again, the inspection of the two computer labs in the Faculty of Education and Liberal Studies by the evaluator revealed that each computer lab had a printer. Thus, the need exist for more printers in the computer labs. It is therefore recommended that *the B. Ed. program administrators provide additional printers for students use.*

Adequacy of computer lab hours of operation. The students and graduates were asked if the operating hours of the computer labs were adequacy. As shown in Table 49 (column 6), the Module One and Module Two students, and the graduates found the hours of operation for the computer labs adequate, while the Module Three students appear to disagree. This was confirmed by the results of the ANOVA/Bonferroni analyses which revealed that the Module Three Students were significantly lower in their ratings than the Modules One and Two students and the graduates ($F_{3,234} = 7.669$; $p < 0.01$; Table 49, Appendix J).

The students who took part in the focus group discussions pointed that the two computer labs in the Faculty of Education and Liberal Studies were closed after office hours. Thus, the students indicated that they would want the operating hours of these computers extended. When asked, the B. Ed. Program Coordinator referred the evaluator to the computer lab attendants. The computer lab attendants for the two computer labs confirmed what the students indicated. One of the computer attendants indicated that the computer labs were closed because of shortage of computer attendants. She added that general computer labs housed in the Faculty of Engineering and Computer Studies were opened to UTECH staff and students until 11p.m., from Mondays to Fridays. Therefore, it is recommended that *the concerns of the students on gaining access into the computer labs located in the Faculty of Education and Liberal Studies after office hours be considered by the B. Ed. program administrators.*

Student Services

To assess the adequacy of student services, two components were assessed. These were the adequacy of student services and the hostel accommodation provided for the B. Ed. degree students.

Adequacy of student services. As shown in Table 50 (column 4), the students rated the student services provided to them at UTECH as inadequate while the graduates tended to be somewhat uncertain. The results of the ANOVA/Bonferroni analyses revealed that the graduates were significantly higher in their ratings than the Module One and Three students ($F_{3,234} = 7.510$; $p < 0.01$; Table 50, Appendix J).

Table 50
Item Mean and Standard Deviation of Students and Graduates: Adequacy of Student Services and Student Hostel Accommodation

			Adequacy of Student Services		Adequacy of Hostel Accommodation	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	2.05	0.76	1.80	0.89
	Sec.	15	1.60	0.63	1.53	0.64
Mod.2	Bus.	24	1.88	0.68	2.25	0.94
	Sec.	15	2.07	0.80	2.00	0.66
Mod.3	Bus.	24	1.96	0.86	1.96	0.69
	Sec.	20	1.55	0.76	1.35	0.49
Grad.	Bus.	60	2.43	0.83	2.00	0.90
	Sec.	64	2.16	0.70	2.33	0.94

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

During the focus group discussions, most of students in the three groups indicated that they did not benefit from student services such as financial aid offered to other students at UTECH because they were not full-time students. More detailed results on the financial aid to students are provided on p. 228.

Adequacy of student hostel accommodation. In order to assess the adequacy of hostel accommodation for students, the students and the graduates were first asked if they lived on campus. Forty-five percent of Module One Business Studies students, 58.3% of Module Two Business Studies students, 54.2% of Module Three Business Studies students, 38.3% of Business Studies graduates, 46.7% of Module One Secretarial Studies students, 40.0% of Module Two Secretarial Studies students, 40.0% of Module Three

Secretarial Studies students, and 46.9% of the Secretarial Studies graduates indicated that they lived on campus.

Both the students and the graduates who lived on campus and those who did not were then asked if they found student hostel accommodation adequate. As shown in Table 50 (column 5), the students and graduates rated student hostel accommodation inadequate. The results of the ANOVA/Bonferroni analyses revealed the graduates were significantly higher in their ratings than the Module One and Three students ($F_{3,234} = 6.037$; $p < 0.01$; Table 50, Appendix J).

The students who took part in the focus group discussions expressed three concerns. First, they indicated that the hostel accommodation was not comfortable because they found the rooms small. Second, the students indicated that they were not allowed to bring in their personal computers. Thirdly, the students stated that the cost of hostel accommodation was very high and as a result some of the students had to travel a long distance each day in order to attend classes.

The B. Ed. Program Coordinator referred the evaluator to the hostel warden. According to the warden, the sizes of the rooms were average. She stated that the students were not allowed to bring in electrical appliances due to the cost of electricity and the safety of the students' and the university's properties. On the issue of the cost of accommodation, she indicated that the economic situation in the island was responsible. Thus, there is a need for the B. Ed. administrators to revise the cost of student accommodation at UTECH. It is therefore recommended that *the B. Ed. program administrators consider (a) revising the cost of hostel accommodation, and (b) allowing the students use personal computers for their academic work.*

Factors Enhancing the Implementation of B. Ed. Business Education Programs

Evaluation Question 19: What factors enhanced the implementation of the B. Ed. Business Studies and Secretarial Studies programs?

The students, graduates, instructors, senior administrative and academic staff, education officers, and CIDA project officer were asked to identify factors that enhance the implementation of the B. Ed. Business Studies and Secretarial Studies programs. The analysis of their responses led to the identification of four factors. As shown in Table 51, the four factors identified were courses offered, summer program, modular system, and qualified staff.

Table 51
Percentage of Students and Graduates on Factors that Enhance the Implementation of the B. Ed. Business Education Programs

			Factors that Enhance the B. Ed. Programs			
Group	Special.	n	Courses Offered	Summer Program	Modular System	Qualified Staff
Module 2	Business	24	21 (87.5%)	20 (83.3%)	15 (62.5%)	8 (33.3%)
	Secretarial	15	12 (80.0%)	13 (86.6%)	9 (60.0%)	2 (13.3%)
Module 3	Business	24	19 (79.2%)	21 (87.5%)	17 (70.8%)	5 (20.8%)
	Secretarial	20	17 (85.0%)	18 (90.0%)	12 (80.0%)	7 (46.7%)
Grads.	Business	60	51 (85.0%)	49 (81.7%)	44 (73.3%)	26 (43.3%)
	Secretarial	64	60 (93.8%)	55 (85.9%)	51 (79.7%)	30 (46.9%)
Instructors	Business/ Secretarial	18	15 (83.3%)	13 (72.2%)	12 (77.8%)	11 (61.1%)

Courses offered. As shown in Table 51, from 79.2% to 85.0% of the students and 85.0% to 93.8% of the students a total of 84.6% of the Module Two Business and Secretarial students, 81.8% of the graduates, and 83.3% of the instructors indicated that the type of courses offered enhanced the implementation of the B. Ed. Business Education programs. During the interviews, the students, the Head of School of Vocational and Technical Education, the Head of Department of Education and Liberal Studies, the B. Ed. Program Coordinator, the three Education officers, and the CIDA Project officer also expressed the same this view. For example, the Head of School of Vocational and Technical Education said that it was only at UTECH that students could graduate with a B. Ed. degree in Business Education in Jamaica.

Summer program. From 83.3% to 90.0% of the students, 81.7% to 85.9% of the graduates, and 72.2% of the instructors indicated that offering the B. Ed. program during the summer break was an advantage. The students who participated during the focus group discussions confirmed this by indicating that summer break provided an opportunity for teachers with a Diploma in Business Education to obtain a degree without quitting their full-time jobs. This view was also expressed by the former and current Presidents of UTECH, the Head of School of Vocational and Technical Education, the Head of Department of Education and Liberal Studies, the B. Ed. Program Coordinator, and the three Education officers and the CIDA Project officer. It should be noted that the Dean was unwilling to respond to this question during the interview with her; instead she referred the evaluator to the B. Ed. Program Coordinator.

Modular system. As shown in Table 51, between 60.0% to 80.0% of the students, 73.3% and 79.7% of the graduates, and 77.8% of the instructors indicated that by organizing the program into three modules and offering them over three summers enhanced the B. Ed. Business Education programs. This view was reechoed during the interviews by the students, the former and current Presidents of UTECH, the Head of School of Vocational and Technical Education, the Head of Department of Education and Liberal Studies, the B. Ed. Program Coordinator, and the three Education officers and the CIDA Project officer. For example, the former President indicated that the modularization of the B. Ed. programs into a three parts provided students with the opportunity of progressing from one module to the next within three summer components. However, the students also expressed some concerns over the modularizing the B. Ed. programs at UTECH. These concerns are discussed in the next chapter.

Qualified staff. While an advantage, the recruitment of qualified staff was mentioned by a lower percentage of the students and graduates than the first three factors. From 13.3% to 46.7% of the students, 43.3% to 46.9% of the graduates, and 61.1% of the instructors indicated that the recruitment of qualified staff to work in the B. Ed. programs enhanced its implementation. The Head of School of Vocational and Technical Education, the Head of Department of Education and Liberal Studies, and the B. Ed. Program Coordinator also indicated that recruiting qualified instructors enhanced the implementation of the B. Ed. Business Education programs. More detailed discussions about the instructional staff were presented earlier (see pp.118-120).

Factors Affecting the Implementation of B. Ed. Business Education Programs

Evaluation Question 20: What factors affected the implementation of the B. Ed. Business and Secretarial Studies programs?

The students, graduates, instructors, senior administrative and academic staff, the Education officers and the CIDA Project officer were asked to identify the factors that affected the implementation of the B. Ed. Business Education programs. The Education officers and the CIDA Project officer failed to list any factor that might have affected the implementation of the B. Ed. Business Education programs. The analysis of the responses of the others led to the identification of four factors listed in Table 52. These four factors are courses offered, length of program, high fees, records management, and construction noise.

Table 52
Percentage of Students and Graduates on Factors that Affect the Implementation of the B. Ed. Business Education Programs

			Factors that Affect the B. Ed. Programs			
Group	Special.	n	Length of Program	High Fees	Records Manage.	Construct-ion Noise
Module 2	Business	24	20 (83.3%)	18 (75.0%)	15 (62.5%)	10 (41.7%)
	Secretarial	15	15 (100%)	11 (73.3%)	11 (73.3%)	6 (40.0%)
Module 3	Business	24	19 (79.2%)	21 (87.5%)	13 (54.2%)	11 (45.8%)
	Secretarial	20	18 (90.0%)	15 (75.0%)	10 (50.0%)	8 (40.0%)
Grads.	Business	60	44 (73.3%)	52 (86.7%)	40 (66.7%)	35 (58.3%)
	Secretarial	64	51 (79.7%)	57 (89.1%)	46 (71.9%)	40 (62.5%)
Instructors	Business/ Secretarial	18	12 (66.7%)	6 (33.3%)	14 (77.8%)	10 (55.6%)

Length of program. As shown in Table 52, between 79.2% to 100% of the students and 79.7% to 73.3% of the graduates, and 66.7% of the instructors indicated that the length of the program affected the implementation of the B. Ed. Business Education programs. As indicated earlier, the students during the focus group discussions expressed a concern about the length and pace of the B. Ed. programs. The students indicated that they did not have time to study for their final examinations. The students' views were shared by the Head of School of Vocational and Technical Education, the Head of Department of Education and Liberal Studies, and the B. Ed. Program Coordinator. They all agreed that the seven-week summer component was not adequate for the implementation of the programs. The Head of School of Vocational and Technical Education added that the pace of the program was too fast for the students to assimilate what had been taught. According to Taba (1962), "the principle of pacing is merely helpful in avoiding wasteful teaching: too early, too much, too great a refinement or speed" (p. 92). Hence, effective learning can only occur when the pacing of instruction is carried out carefully. According to the B. Ed. Program Coordinator, the pace of the program was such because the students can only be away from their teaching jobs for seven weeks. Hence, the length of the program was designed to be seven weeks.

High fees. As shown in Table 52, more than 73% of the students and 87% of the graduates indicated that high fees charged in the B. Ed. Business Education programs negatively affected its implementation. One-third of the instructors agreed. During the focus group discussions, the students stated that the yearly increase in fees made it difficult for some students to raise enough money to continue the program. According to the current President of UTECH, the yearly increase in fees was due to the high operating cost of UTECH and low government subvention. The Head, School of Vocational and Technical Education; the Head, Department of Education and Liberal Studies; and the B. Ed. Program Coordinator indicated that the fees for the B. Ed. programs was commensurate with the fees paid by students in other programs within Jamaica.

Records management. The third most frequently listed factor was poor records management. As shown in Table 52, between 50.0% and 73.3% of the students, from 66.7% to 71.9% of the graduates, and 77.8% of the instructors agreed that records management negatively affected the implementation of the B. Ed. programs. As indicated earlier, during the focus group discussions the students expressed concerns about the state of records management in the B. Ed. degree office. None of the administrative staff agreed to comment except the B. Ed. Program Coordinator who agreed that there was a records management problem. However, she indicated that efforts were being made to ensure that all records were properly filed for easy and quick access.

Construction noise. The next most frequent identified factor was construction noise. As shown in Table 52, from 40.0% to 45.8% of the students, from 58.3% to 62.5% of the graduates, and 55.6% of the instructors indicated that construction noise around and within the faculty building during the summer component negatively affected the implementation of the programs. As earlier indicated, the students identified noise as a problem that affected them during the examination period. The former President and the current President of UTECH, the Head of School of Vocational and Technical Education, the Head of Department of Education and Liberal Studies, and the B. Ed. Program Coordinator acknowledged this problem but indicated that it did not affect the implementation of the B. Ed. programs. According to the former President, the summer period was chosen for construction of projects because the traffic on campus was relatively low.

There is need to address these factors identified above. Therefore, it is recommended that *the administrators of the B. Ed. Business Education programs (a) examine the length of the program with a view of increasing it, (b) examine the possibility of the yearly increase of students' fees, (c) ensure that the records and documents pertaining to the B. Ed. programs are properly stored and protected, and (d) ensure that the construction noise is reduced during the summer component.*

Future Threats to the Success of B. Ed. Business Education Programs

Evaluation Question 21: What factors posed future threats to the success of the B. Ed. Business and Secretarial Studies programs?

The students, graduates, instructors, senior administrative and academic staff, the Education officers, and the CIDA Project officers were asked to identify factors that might pose future threats to the success of the B. Ed. Business and Secretarial Studies programs. The analysis of these responses led to the identification of four factors. As shown in Table 53, the four factors identified were accreditation, other programs, program quality, and quality of resources.

Accreditation. As shown in Table 53, from 83.3% to 100% of the students and approximately 83.0% of the graduates and 55.6% of the instructors indicated that the lack of program accreditation by the University Council of Jamaica (UCJ) might pose a threat to the future success of the B. Ed. programs.

In the focus group discussions, the students indicated that due to lack of accreditation by the UCJ, they were not recognized as B. Ed. holders by the Ministry of

Education who refused to pay them as B. Ed. graduates. When asked, none of the administrative and academic staff agreed to comment on this issue. The Education officers confirmed what the student said, while the CIDA Project officer made no comment.

Table 53
Percentage of Students and Graduates on Factors that Pose Future Threats to the Success of the B. Ed. Business Education Programs

			Factors the Pose as Threats to the B. Ed. Programs			
Group	Special.	n	Accreditation	Other Programs	Program Quality	Quality of Resources
Module 2	Business	24	20 (83.3%)	14 (58.3%)	15 (62.5%)	18 (64.8%)
	Secretarial	15	12 (80.0%)	9 (60.0%)	10 (66.7%)	9 (60.0%)
Module 3	Business	24	22 (91.7%)	20 (83.3%)	17 (70.8%)	14 (58.3%)
	Secretarial	20	20 (100%)	15 (75.0%)	15 (75.0%)	13 (65.0%)
Grads.	Business	60	50 (83.3%)	52 (86.7%)	37 (61.7%)	33 (55.0%)
	Secretarial	64	53 (82.8%)	60 (93.8%)	45 (70.3%)	41 (64.1%)
Instructors	Business/ Secretarial	18	10 (55.6%)	12 (66.7%)	9 (50.0%)	15 (83.3%)

Other programs. The second most frequent factor was the possible introduction of competitive programs at other tertiary institutions in Jamaica. As shown in Table 53, between 62.5% and 75.0% of the students and between 61.7% and 70.3% of the graduates, and 66.7% of the instructors indicated that the other programs being offered within the island might be a threat to the success of the B. Ed. Business Education programs in the future. In the focus group discussions, the students indicated that other colleges within and outside Jamaica were strong competitors to the B. Ed. programs. The students added that the Business Administration and/or Business Management programs offered through off-shore US institutions gave better incentives such as free textbooks and an opportunity to visit the United States during the program. By doing so, the programs pose a threat to the future of the B. Ed. programs at UTECH.

The UTECH President the Head of School of Vocational and Technical Education, the Head of Department of Education and Liberal Studies, and the B. Ed. Program Coordinator disagreed with the views of the students. The Head of School of Vocational and Technical Education restated the fact the UTECH was the only institution where the students would obtain a B. Ed. in Business Education. Further, he did not see the off-shore US programs as a threat.

Program quality. As shown in Table 53, from 62.5% to 75.0% of the students, 61.7% to 70.3% of the graduates, and 50.0% of the instructors indicated that the poor program quality might pose a future threat to its success in the future. The students who took part during the focus group discussions stated that the quality of the B. Ed. programs offered was not commensurate with the fees paid by the students. They added that this could pose a threat to the implementation of the B. Ed. programs in the future. The current President of UTECH, the Head of School of Vocational and Technical Education the Head of Department of Education and Liberal Studies, and the B. Ed. Program Coordinator disagreed with the students' views. Instead, the Head of School of

Vocational and Technical Education indicated that the quality of the program in future would improve.

Quality of resources. As shown in Table 53, from 58.3% to 65.0% of the students, between 55.0% and 64.1% of the graduates, and 83.3% of the instructors indicated that the quality of resources made available for the programs might pose a threat to the success of the B. Ed. programs. The UTECH President, the Head of School of Vocational and Technical Education, the Head of Department of Education and Liberal Studies, and the B. Ed. Program Coordinator disagreed with the views of the students and the graduates (see pp. 121-126).

The need exists for UTECH and the B. Ed. program administrators to be aware of these factors identified above. Thus, to safe guard against future threats such as the ones listed above, UTECH should work to improve its services, and ensure that they are competitive. Therefore it is recommended that *the B. Ed. programs (a) ensure that the B. Ed. programs be accredited by UCJ, (b) ensure that the quality of program be improved in order to make the B. Ed. program more competitive with other programs, and (c) improve the quality of resources provided for the B. Ed. programs.*

CHAPTER EIGHT

PRODUCT EVALUATION RESULTS AND FINDINGS

The set of evaluation questions designed to assess the products of the B. Ed. Business Studies and Secretarial Studies programs addressed the students academic performance in the B. Ed. Business Education programs, their attitudes toward the program and whether or not they would recommend it to others, the graduates level of performance in their teaching positions, the strengths and weaknesses of the B. Ed. Education programs, the success rate of students in the programs, and the perceptions of the students and graduates toward the modular system at UTECH.

Students Academic Performance in the B. Ed. Business Education Programs

Evaluation Question 22: What is the level of the students' academic performance in the B. Ed. Business Studies and Secretarial Studies programs?

The academic achievement of the students was examined using two sources of information. The sources were the instructors and information from the records office. The instructors were asked to do two things. First, they were asked to rate the students academic performance on the assignments, mid-term tests, and final examination as well as the overall general performance on a 3-point scale: excellent, average, and poor. Second, they were asked to compare their students' performance with performance of students in the B. Ed Home Economics and Technology programs. The information obtained from the records office included the proportion of graduating students receiving first class, second class, and pass degrees.

The 18 instructors who participated in the study rated the performance of their students on assignments as good, test performance as fair, and examination performance between average and excellent. Concerning the students' general or overall performance, 33.3% rated the academic performance of Business Studies and Secretarial Studies students as average, 38.9% rated students' performance as above average, while 27.8% rated students' performance as excellent. Ten (55.6%) of the instructors indicated that the Business and Secretarial Studies students performed better than students in the Home Economics and Technology programs, while the remaining 8 (44.4%) of the instructors indicated that the academic performance of students in Business and Secretarial Studies programs was about the same. The instructors who indicated that the students performed at higher level pointed out that the B. Ed. Business Education students had stronger academic backgrounds before entering the B. Ed. programs.

According to 16 of the instructors, the performance of many of the students in the two B. Ed. Business Education programs improved as they progressed through the three modules. The B. Ed. Program Coordinator agreed with the 16 instructors, stating that as the students progressed through the programs, their level of performance continued to increase. The remaining two instructors felt that the level of performance had remained the same through the three modules.

In addition to having the instructors describe the performance of the B. Ed. Business Education students in comparison to the students in the B. Ed. Home Economic and Technology programs, the evaluator reviewed the Program Coordinator's Report for 1998-1999 with a view of comparing students performance across the different programs. Presented in Table 54 are the areas of specialization, number of students who began their program in 1996, degree classifications, and the percentages of graduates receiving first class, second class upper, second class lower, and pass standing, and the number of students who graduated.

Table 54
Number and Percentages of Graduates Across the Six Specialist Areas in the B. Ed. Degree Programs in November 1999

Area of Specialization	Number Enrolled 1996	First Class Honors	Second Class Upper	Second Class Lower	Pass	Number Graduated 1999
Business Ed.:						
Business	22	8 (36.4%)	4 (18.2%)	1 (4.55%)	5 (22.7%)	18 (81.8%)
Secretarial	23	1 (4.35%)	4 (17.4%)	1 (4.35%)	3 (13.0%)	9 (39.1%)
Home Econ.:						
Foods	50	12 (24.0%)	9 (18.0%)	5 (10.0%)	5 (10.0%)	31 (62.0%)
Clothing	48	3 (6.25%)	4 (8.33%)	2 (4.17%)	6 (12.5%)	15 (31.3%)
Technology:						
General	21	0 (0.0%)	3 (14.3%)	0 (0.0%)	2 (9.52%)	5 (23.8%)
Industrial	9	2 (22.2%)	2 (22.2%)	1 (11.1%)	0 (0.0%)	5 (55.5%)

The number of students enrolled in the B. Ed. Business Studies and Secretarial Studies were 22 and 23, respectively. Of these numbers, a total of 18 (81.8%) Business Studies students graduated after completing the three modules within the three years with 8 first class honors degrees, 4 second class upper degree, 1 second class lower degree, and 5 passes. Of the 23 Secretarial Studies students, 9 graduated with 1 first class, 4 with second class upper, 1 with second class lower, and 3 with passes.

For the B. Ed. Home Economics programs, there were 12 students from the Foods group who obtained first class degrees, 9 second class upper degrees, and 5 each with second class lower and pass degrees. There were 48 students who enrolled in the Clothing and Textile program. Of this number, 3 graduated with a first class honors degree, 4 with a second class upper degree , 2 with second class lower degree, and 6 with a pass (see Table 54).

For the B. Ed. Technology programs, there were no first class honors and second class lower degree graduates from the Industrial Technology program. However, 3 students obtained a second class upper degree and 2 received a passing degree. In the General Technology group, there were 9 students. Of this number, 2 graduated with a first class honors degree, 2 with a second class upper degree, and 1 second class lower degree (see Table 54). The above findings do not include all of the students in each of the programs. As revealed in the last column of Table 54, not all of the students graduated. The percentages who did not graduate was 18.2% for Business Studies. For Secretarial Studies the rate was much higher, at 60.9%. For the remaining B. Ed programs, the completion rates varied from 38.0% (Home Economics: Foods and Clothing) to 76.2% (Technology: General and Industrial).

Taken together, these results reveal that the students in the Business Studies program performed better than the students in the Secretarial Studies program and the Home Economics and Technology programs. However, there was no evidence to support the claim made by 55.6% of the instructors who indicated that students in both the Business Studies and Secretarial Studies performed better than students in the Home Economics and the Technology programs. As shown in Table 54, only the Business

Studies group had the highest number of graduates when compared with the number of the students the other programs. Thus, it is recommended that *the B. Ed. program administrators conduct an outcome study (Bower & Myers, 1976) to identify reasons for lower completion rates in the B. Ed. programs, and to monitor the efficiency of operations within the B. Ed. programs.*

Students' and Graduates' Attitude Toward B. Ed. Programs

Evaluation Question 23: What are the attitudes of the students and the graduates toward the B. Ed. Business Studies and Secretarial Studies programs?

To assess the attitudes of students and the graduates toward the B. Ed. Business Education programs, three components were examined. These were student class attendance and use of time, student relationships and behaviors, and student and graduate overall attitude toward the B. Ed. programs.

Class attendance and use of time. As shown in Table 55, students in the three modules and the graduates indicated that they attended classes regularly. While the results of the ANOVA/Bonferroni analyses revealed that the graduates were significantly lower in their ratings than the Module Two students ($F_{3,234} = 6.434$; $p < 0.01$; Table 55, Appendix J), the majority of both the graduates and the students reported that they attended class regularly. Likewise, the graduates were significantly higher in their ratings of their use of time than the Module Three students ($F_{3,234} = 4.267$; $p < 0.01$; Table 55, Appendix J), both the students in all the modules and the graduates tended to agree that they used their time in the program effectively.

Table 55
Item Mean and Standard Deviation of Students and Graduates: Class Attendance and Use of Time

			Students' Class Attendance		Students' Use of Time	
Group	Spec.	n	$\overline{X}$	*SD*	$\overline{X}$	*SD*
Mod.1	Bus.	20	3.80	0.41	2.85	0.67
	Sec.	15	3.40	0.51	2.93	0.70
Mod.2	Bus.	24	3.88	0.34	3.17	0.76
	Sec.	15	3.93	0.26	3.07	0.70
Mod.3	Bus.	24	3.75	0.44	3.25	0.68
	Sec.	20	3.70	0.47	2.45	0.89
Grad.	Bus.	60	3.62	0.49	3.42	0.62
	Sec.	64	3.39	0.68	3.08	0.82

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

During the focus group discussions, the students in the three modules indicated that they attended classes regularly and that they spent most of their time doing assignments, leaving little time for studying. However, the instructors indicated that about 85.0% of the students attended classes regularly. When asked, the B. Ed. Program Coordinator indicated that students were expected to maintain at least 70.0% class attendance during the summer component. She added that many of the students did not attend classes regularly, and thus, did not meet the minimum class attendance requirement. She indicated that domestic and transportation problems were the common reasons given by the students for being absent from classes. With regards to use of time, the students expressed concern about the time spent on assignments, with little time left to study for the final examinations, should be addressed. It is, therefore recommended that *the B. Ed. program administrators review and possibly revise the number of* *"instructor contact and students committed time or learning time" (Theodossin, 1986, p.13).*

Students' relationship and behaviors in B. Ed. Programs. While the results of the ANOVA/Bonferroni analyses revealed that the graduates were significantly higher in their ratings than the Module Two and Three students ($F_{3,234} = 5.204$; $p < 0.01$; Table 56, Appendix J), generally the students and the graduates agreed that they enjoyed working with each other in the B. Ed. Business Education programs (see Table 56).

The students in three modules agreed during the focus group discussions that they got along with each other. This was confirmed by the B. Ed. Program Coordinator who also agreed that the students had good working relationships with each other.

Table 56
Item Mean and Standard Deviation of Students and Graduates: Students Relationship and Behaviors

			Students Relationship		Students Behaviors	
Group	Spec.	N	$\bar{X}$	*SD*	$\bar{X}$	*SD*
Mod.1	Bus.	20	3.15	0.59	3.30	0.47
	Sec.	15	3.07	0.80	3.47	0.52
Mod.2	Bus.	24	2.96	0.69	2.67	0.96
	Sec.	15	3.27	0.46	2.60	0.91
Mod.3	Bus.	24	3.04	0.55	3.04	0.55
	Sec.	20	3.10	0.55	3.20	0.52
Grad.	Bus.	60	3.42	0.62	3.13	0.85
	Sec.	64	3.42	0.69	3.31	0.73

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

With, the exception of the Module Two students, the students and the graduates indicated that their fellow students were well behaved (see Table 56, column 5). The

Module Two students appeared to be less certain. These findings were confirmed by the ANOVA/Bonferroni ($F_{3,234} = 7.440$; $p < 0.01$; Table 56, Appendix J).

Eleven of the 18 instructors indicated that the students in the Business Studies and Secretarial Studies were well behaved; the remaining seven were less certain. When asked, the Head, School of Vocational and Technical Education; Head, Department of Humanities and Liberal Studies, and the B. Ed. Program Coordinator reported that no student behavior problems had been reported for the students in the two B. Ed. Business Education programs.

Attitude toward studying in the B. Ed. programs. The students and graduates were asked to rate their attitude toward studying in the B. Ed. programs. The item means and standard deviations for this item are provided Table 57.

Table 57
Item Mean and Standard Deviation of Students and Graduates: Students' and Graduates' Attitude Toward B. Ed. Programs

Group	Specialization	n	Students' & Graduates' Attitudes $\overline{X}$	SD
Module 1	Business	20	3.43	0.52
	Secretarial	15	2.57	0.68
Module 2	Business	24	2.84	0.41
	Secretarial	15	2.84	0.56
Module 3	Business	24	2.73	0.69
	Secretarial	20	2.78	0.64
Graduate	Business	60	2.91	0.83
	Secretarial	64	3.03	0.70

1 = Strongly Disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly Agree

As shown, the students and the graduates generally held a positive attitude toward studying in the B. Ed. programs. The results of the ANOVA analysis revealed that there was no significant differences ($F_{3,234} = 1.429$; nsd; Table 57, Appendix J). However, during the focus group discussions, some students in Modules Two and Three who had previously completed the Diploma program at UTECH indicated that they would have preferred to obtain their B. Ed. degree from another institution instead of UTECH in order to obtain a different educational experience from a different set of instructors.

The instructors were asked to comment on the attitudes of the students toward studying in the B. Ed. programs. Of the 18 instructors who responded, 55.6% said that the students' attitudes were positive, while 44.4% of the instructors indicated that the students' attitudes were both positive and negative. This latter view was also expressed by the B. Ed. Program Coordinator. She claimed that students whose academic performance was good had a more positive attitude toward the program than did the students with weak academic performance.

The graduates were asked to respond to attitude four items in their surveys. First, the graduates were asked if they wished they had attended a different institution rather than the B. Ed. program at UTECH. Thirty-five (58.3%) of the Business Studies graduates and 35 (54.7%) of the Secretarial Studies graduates said no. Of the remaining graduates, 22 (38.3%) Business Studies graduates and 21 (32.8%) Secretarial Studies graduates said yes, while 2 (3.3%) Business Studies graduates and 8 (12.5%) Secretarial Studies graduates were not sure. Second, the graduates were asked if they would enroll in the same faculty at UTECH. Thirty-one (51.7%) Business Studies graduates and 33 (51.6%) Secretarial Studies graduates said yes, 28 (46.7%) Business Studies graduates and 27 (42.2%) Secretarial Studies graduates said no, and one (1.7%) Business Studies graduate and 4 (6.3%) Secretarial Studies graduates were not sure. Again, the findings are not very favorable. Third, the graduates were asked if they would recommend the B. Ed. Business Education programs to a friend and or a relative. Forty-nine (81.7%) Business Studies graduates and 43 (67.2%) Secretarial Studies graduates said yes. Eight (13.3%) Business Studies graduates and 18 (28.1%) Secretarial Studies graduates said no, while 3 (5.0%) Business Studies graduates and 3 (4.7%) Secretarial Studies graduates were not sure. Lastly, the graduates were asked how much they liked the type of training provided in the B. Ed. Business Education. The graduates were essentially divided: 27 (45.0%) Business Studies graduates and 28 (43.8%) Secretarial Studies graduates said that they liked it very much, 28 (46.7%) Business Studies graduates and 27 (42.2%) Secretarial Studies graduates indicated that they liked it fairly much, and 5 (8.3%) Business Studies graduates and 9 (14.1%) Secretarial Studies graduates indicated that they disliked it.

Taken together, the attitudes of the graduates are somewhat mixed. It is likely that some of this is attributable to the poor view of the program quality and the difficulty the students had in attending classes and, especially, the seminars. Thus, it is recommended that *the B. Ed. program administrators work with the students to clarify areas of discontent so as to increase the attitudes of the students.*

Level of Performance of Graduates of the B. Ed. Business Education Programs

Evaluation Question 24: What is the level of performance of the Business Studies graduates and Secretarial Studies graduates in their present role as teachers?

The principals of the high school in which the Business Studies and Secretarial Studies graduates were employed were asked to assess the job performance of the graduates who were teaching in their schools. The scale used for this purpose consisted of 14 six-point Likert items. The item means and item standard deviations for this set of items are reported in Table 58; the internal consistency for the set of items was 0.94.

Table 58
Item Mean and Standard Deviation of Graduates on Job Performance

Group	Specialization	n	$\overline{X}$	*SD*
Graduates	Business	60	4.73	0.72
	Secretarial	64	4.69	0.56

Note: 1= Unacceptable, 2 = Below Average, 3 = Average, 4 = Above Average, 5 = Good, 6 = Excellent

The employers rated the job performance of both the Business Studies graduates and Secretarial Studies graduates between "above average" and "good." The ANOVA analysis revealed that the there was no significant difference between to two groups ($F_{1,122}$ = 0.071; nsd; Table 58, Appendix J).

Reported in Table 59 is a summary of the strengths and weaknesses of the B. Ed. Business Studies and Secretarial Studies graduates identified by the principals. Among the strengths identified by at least 65.0% of the principals, were administrative skills, assessment of student performance, computer skills, student counseling, poise and appearance, sports activities, and teaching skills. The weaknesses identified by at least half of the principals, included adapting to the needs of students, computer skills, communication skills, lessons planning, professionalism, using and conducting research, resentment toward supervision, and lack of variety of teaching methods and use of visual aids to enhance their teaching.

Table 59
Strengths and Weaknesses of the B. Ed. Business Studies and Secretarial Studies Graduates

Strong Areas	Frequency	Weak Areas	Frequency
Administrative skills	50 (79.4%)	Adapting to needs & flexibility	43 (68.3%)
Assessment skills	49 (77.8%)	Computer skills	29 (46.0%)
Computer skills	41 (65.1%)	Comm. skills	51 (81.0%)
Counseling skills	45 (71.4%)	Lesson planning	53 (84.1%)
Poise & appearance	60 (95.2%)	Professionalism	35 (55.6%)
Sports skills	41 (65.1%)	Research skills	47 (74.6%)
Teaching skills	59 (93.7%)	Resentment toward supervision	34 (54.0%)
-	-	Teaching methods	42 (66.7%)
-	-	Use of visual aids	58 (92.6%)

Lastly, the high school principals were asked to compare the B. Ed. Business Studies and Secretarial Studies graduates job performance with other teachers in their schools who also taught Business subjects, and to provide recommendations that would facilitate better job performance. Three dimensions were considered: job performance, training, and attitude. A summary of their responses is presented in Table 60.

Table 60

Job Performance of the B. Ed. Business Education Graduates When Compared to Other Graduates, and Recommendations

Quality	Frequency	Recommendation	Frequency
Job performance:			
Weaker	8 (12.7%)	Visual aid	58 (92.6%)
Stronger	29 (46.0%)	Lesson plan	53 (84.1%)
Same	26 (41.2%)	Teaching method	42 (66.7%)
Training:			
Less adequate	14 (22.2%)	Comm. skills	51 (81.0%)
Adequate	49 (77.8%)	Computer skills	29 (46.0%)
Attitude:			
More negative	2 (3.2%)	Professionalism	63 (100.0%)
More positive	20 (31.8%)		
Same	41 (65.1%)		

Job performance. As shown in Table 60, approximately the same number of principals, 26 (41.2%) and 29 (46.0%) respectively, rated the B. Ed. Business Studies and Secretarial Studies graduates' job performance as either the same as or stronger than the job performance of other teachers in their schools. At the same time, the principals recommended that the B. Ed. Business Education program planners include the following topics for the B. Ed. Business Education curriculum: the preparation and use of visual aids (92.6%); preparation of written lesson plans (84.1%), and methods for teaching (66.7%).

Training. Slightly, more than three-quarters (77.8%) of the principals rated the educational training of the B. Ed. Business Studies and Secretarial Studies graduates as adequate in comparison to the training of the other teachers in their schools. The remaining principals considered the training less adequate. Four out of five of the principals recommended that the B. Ed. Business Education program planners improve the curriculum dealing with communication skills and slightly less than half (46.0%) of the principals indicated that the computer curriculum needed to be improved.

Attitude. Regarding attitude, 20 (31.8%) of the principals indicated that the B. Ed. Business Studies and Secretarial Studies graduates' attitude to teaching was more positive than the attitude of the other teachers while 41 (65.1%) indicated that attitudes of the two groups of teachers were comparable. All the principals recommended that the B. Ed. Business Education program administrators address the issue of professionalism in the Business Studies and Secretarial Studies programs.

In summary, the principals suggested improving and or revising the B. Ed. Business Education curriculum. Again, these findings point to the recommendations made earlier that there is need for revision of the curriculum for both the Business Studies and Secretarial Studies programs (see pp. 221-222).

Success Rate

Evaluation Question 25: What is the success rate of the students admitted into the B. Ed. Business Studies and Secretarial Studies programs?

Since the B. Ed. Business Studies and Secretarial Studies programs were established in 1982, a total of 171 Business Studies students and a total of 240 Secretarial Studies students were admitted up through 1997. The year of registration was set at 1997 for this evaluation since the students who began their programs in 1997 should have graduated in the spring of 1999. Of these students, 116 Business Studies students and 172 Secretarial Studies students have so far graduated from the programs; 55 (32.2%) of the students have not yet completed the Business Studies program (see Table 61) while 68 (28.3%) of the students have not yet completed the Secretarial Studies program.

In interpreting these findings, three limitations in the data need to be considered. First, these figures were collected from the students records in the B. Ed. office as well as the University Records office. In both offices, the evaluator identified a number of missing records for both the Business and Secretarial programs. For example, no record was found for in-take and out-put for the Secretarial program for the years' 1983 to 1986, and for both the Secretarial and Business programs for the years 1985 to 1989. Hence, the figures quoted above did not include these periods. Second, data available in the students records in the B. Ed. office did not match the data available in the University Records office. Third, the number of students reported above as not completed include an unknown number of students who migrated from Jamaica to North America and students with incomplete records. Consequently, the finding that 55 students did not complete the Business Studies program and 68 students did not complete the Secretarial Studies program should be regarded as estimates and not true figures.

Table 61
Percentage of Graduates and Incomplete Students of the B. Ed. Business Education Programs 1982-1999

Business Studies Program			Secretarial Studies Program		
Number Enrolled	Number & Percentage Completed	Number & Percentage of Incomplete	Number of Enrolled	Number & Percentage Completed	Number & Percentage of Incomplete
171	116 (67.8%)	55 (32.2%)	240	172 (71.7%)	68 (28.3%)

To summarize, it appears that up to a third of the students who enrolled into the B. Ed. Business Studies program and Secretarial Studies program did not complete their studies. However, to be able to assess the success rate more accurately, a more complete and reliable records management procedure is needed. Consequently, as earlier recommended *the B. Ed. program administrators need to review the supervision of the research project in order to determine the best way to assist students in completing their projects and the program.* Further, it is recommended that *the B. Ed. program administrators improve the records management for the two programs.*

Strengths and Weaknesses of the B. Ed. Business Education Programs

Evaluation Question 26: What are the strengths and weaknesses of the B. Ed. Business Studies and Secretarial Studies programs?

The students, graduates, instructors, senior administrative and academic staff, and the Education officers were asked to list four strengths and four weaknesses of the B. Ed. Business Studies and Secretarial Studies programs. The most frequently mentioned strengths, mentioned by at least half of the respondents, are presented in Table 62. These six strengths were teacher training opportunities; courses offered in the programs; demand for graduates; job advancement of graduates; summer/in-service opportunities; and promoting international relations within the Caribbean regions and beyond. They are ordered in Table 62 terms of the number of times mentioned, with the most frequent being "summer program."

Strengths

Summer program. The fact that modules were organized around a summer component was identified as a strength by at least 80.0% of the respondents in each group. Likewise, the former and current UTECH Presidents, the Dean of Faculty of Education and Liberal Studies, the Head of School of Technical and Vocational Education, the Project Officer for CIDA, the three Education officers, and the B. Ed.

Program Coordinator also expressed that the summer break allowed matured working adults an in-service opportunity to improve their education was clearly a strength of both programs.

Table 62

Percentage of Students, Graduates, and Instructors on the Strengths of the B. Ed. Business Studies and Secretarial Studies Programs

	Strengths of the B. Ed. Business and Secretarial Studies Programs					
Group	Summer/ In-service	Teacher Training	Demand for Grads.	Relevance Courses	Job Advanceme.	Internat. Relations
Module 1: Business	20 (100%)	20 (100%)	15 (75.0%)	12 (60.0%)	10 (50.0%)	11 (55.0%)
Secretarial	12 (80.0%)	13 (86.7%)	12 (80.0%)	10 (66.7%)	8 (53.3%)	8 (53.3%)
Module 2: Business	22 (91.7%)	20 (83.3%)	21 (87.5%)	18 (75.0%)	15 (62.5%)	14 (58.3%)
Secretarial	14 (93.3%)	15 (100%)	10 (66.7%)	12 (80.0%)	13 (86.7%)	9 (60.0%)
Module 3: Business	24 (100%)	23 (95.8%)	20 (83.3%)	21 (87.5%)	17 (70.8%)	16 (66.7%)
Secretarial	18 (90.0%)	17 (85.0%)	18 (90.0%)	16 (80.0%)	15 (75.0%)	12 (60.0%)
Graduates: Business	57 (95.0%)	51 (85.0%)	55 (91.7%)	48 (80.0%)	44 (73.3%)	36 (60.0%)
Secretarial	59 (92.2%)	60 (93.8%)	62 (96.9%)	53 (82.8%)	51 (79.7%)	44 (68.8%)
Instructors	18 (100%)	18 (100%)	15 (83.3%)	12 (66.7%)	14 (77.8%)	10 (55.6%)

Teacher training. The vast majority (83.3% to 100%) of the members in each group indicated that a strength of the B. Ed. Business Studies and Secretarial Studies programs was that it provided advanced training in technical and vocational education for Business teachers. This view was shared by the former and current UTECH Presidents, the Dean, Faculty of Education and Liberal Studies, the Head, School of Technical and Vocational Education, the Project Officer for CIDA, the three Education Officers, and the B. Ed. Program Coordinator. As mentioned earlier, the Head of School of Technical and Vocational Education pointed out that UTECH was the only Caribbean institution that offered such programs.

Demand for graduates. Between 67% to 97% of the respondents indicated that the high demand for the graduates of the B. Ed. Business Studies and Secretarial Studies programs was a strength of the two programs. This view was shared by the former and current UTECH Presidents, the Dean of Faculty of Education and Liberal Studies, the Head of School of Technical and Vocational Education, the Head of Department of Humanities and Liberal Studies, the three Education Officers, and the B. Ed. Program Coordinator. According to the B. Ed. Program Coordinator and the Head of School of Technical and Vocational Education, as the only Caribbean institution that provided B. Ed. degree programs for technical teachers, the demand for the graduates of these programs was high.

Relevance of courses. The fourth most frequently mentioned strength of the B. Ed. Business Studies and Secretarial Studies programs was the relevance of the courses. From 60.0% to 80.0% of the respondents indicated that the courses included in the two programs met the needs of the students and their employers. According to the former

UTECH President, the Dean of Faculty of Education and Liberal Studies, the Head of School of Technical and Vocational Education, the Head of Department of Humanities and Liberal Studies, the three Education Officers, and the B. Ed. Program Coordinator the core courses and the specialist courses provide students with the opportunities to acquire technical and professional skills needed for their teaching careers.

Job advancement. The next most frequent strength identified by at least 50.0% of the respondents in each group was the professional positions attained by the graduates. The former and current UTECH Presidents, the Dean of Faculty of Education and Liberal Studies, the Head of School of Technical and Vocational Education, the Head of Department of Humanities and Liberal Studies, and the B. Ed. Program Coordinator also shared this view. According to the B. Ed. Program Coordinator and the Head of School of Technical and Vocational Education, most of the graduates are instructors, education officers, and trainers in technical centers and other training institutions within and outside Jamaica. The B. Ed. Program Coordinator added that of 27 graduates of the 1999 session, 77.8% were teaching, 14.8% were working with corporate organizations, and 7.4% were working in the Ministries.

International relations. The sixth most frequently mentioned strength of the B. Ed. Business Studies and Secretarial Studies programs was the availability of these programs for students outside of Jamaica. One-half to two-thirds of the respondents in each group indicated that a strength of the B. Ed. Business Studies and Secretarial Studies programs was the training opportunities offered to students from the Caribbean islands as well as students outside the Caribbean regions. Again, the former and current UTECH Presidents, the Dean of Faculty of Education and Liberal Studies, the Head of School of

Technical and Vocational Education, the Project Officer for CIDA and the B. Ed. Program Coordinator also shared the same view. However, the Project officer for CIDA indicated that the Canadian government provided financial assistance specifically for the training of teachers for Jamaica's high schools. This latter observation may account for the observation made earlier that less than 5.0% of the students admitted to the program for the 1999 summer program were foreign students.

Weaknesses

As shown in Table 63, six weaknesses were identified by the students, graduates, instructors, senior administrative and academic staff, and the Education officers. The six weaknesses were limited financial assistance for students, innovation of teaching methods, lack of administrative policies, lack of research culture, lack of qualified staff, and lack of needs and program assessment.

Lack of financial aid for students. The first most frequently mentioned weakness of the B. Ed. Business Studies and Secretarial Studies programs was lack of financial aid for students in the B. Ed. Business Education programs. More than half of the respondents in each group indicated that a weakness of the B. Ed. program was the lack of financial assistance for students in the B. Ed. programs (see p.197 and p. 236 for detailed information on of financial assistance for students).

Lack of innovative methods of delivery. The second most frequently mentioned weakness of the B. Ed. Business Studies and Secretarial Studies programs by the students and the graduates was the absence of the use of a variety of teaching methods. None of the instructors indicated that lack of innovative methods of delivery was a weakness. According to the Director of Human Resources Management, most of the instructional staff in UTECH lacked the ability and skills needed to apply modern techniques for adequate planning and delivery of instruction.

Table 63

Percentage of Students, Graduates, and Instructors on the Weaknesses of the B. Ed. Business Studies and Secretarial Studies Programs

	Weaknesses of the B. Ed. Business and Secretarial Studies Programs					
Group	Lack of Financial Aid	Lack of Innovative Methods	Lack of Clear Adm. Policies	Lack of Program Assessment	Lack of Qualified Staff	Lack of Research Culture
Module 1:						
Business	15 (75.0%)	13 (65.0%)	13 (65.0%)	14 (70.0%)	11 (55.0%)	5 (25.0%)
Secretarial	10 (66.7%)	11 (73.3%)	10 (66.7%)	11 (73.3%)	9 (60.0%)	7 (46.7%)
Module 2:						
Business	22 (91.7%)	23 (95.8%)	20 (83.3%)	21 (87.5%)	11 (45.8%)	15 (62.5%)
Secretarial	14 (93.3%)	14 (93.3%)	11 (73.3%)	13 (86.7%)	9 (60.0%)	10 (66.7%)
Module 3:						
Business	19 (79.2%)	21 (87.5%)	18 (75.0%)	18 (75.0%)	14 (58.3%)	20 (83.3%)
Secretarial	15 (75.0%)	17 (85.0%)	16 (80.0%)	14 (70.0%)	12 (60.0%)	15 (75.0%)
Graduates:						
Business	56 (93.3%)	50 (83.3%)	47 (78.3%)	44 (73.3%)	55 (91.7%)	48 (80.0%)
Secretarial	59 (92.2%)	61 (95.3%)	51 (79.7%)	50 (78.1%)	60 (93.8%)	52 (81.3%)
Instructors	10 (55.6%)	0 (0.0%)	15 (83.3%)	16 (88.9%)	5 (27.7%)	12 (66.7%)

Lack of clear administrative policies. The vast majority of the respondents (65.0% to 83.3%) in each group indicated that a weakness of the B. Ed. programs was the lack of clear administrative policies. According to the Head of School of Technical and Vocational Education, the Head of Department of Humanities and Liberal Studies, and the B. Ed. Program Coordinator, there were no standard policies for the implementation of the B. Ed. programs in UTECH. The Head of School of Technical and Vocational Education added that the set of policies for implementing the B. Ed. program used by the staff in the Faculty of Education and Liberal Studies was somewhat different from those used by UTECH central administration. He added that the university should establish a set of standard rules and regulations that can be applied across all faculties and programs in UTECH.

Lack of needs assessment and program evaluation. From 70.0% to 87.5% of the respondents indicated that a weakness of the B. Ed. Business Studies and Secretarial Studies programs was the lack of regular needs assessment and program evaluation of the B. Ed. programs. This view was shared by the current UTECH President, who gave approval for this evaluation study. According to the President, the B. Ed. programs needed to be assessed in order to identify student needs as well as for the promotion of program excellence. The Head of School of Technical and Vocational Education, the Head of Department of Humanities and Liberal Studies, and the B. Ed. Program Coordinator also expressed the same view. It should be noted that the then Department of Technical Teacher Education conducted a self-study of the B. Ed. Business Education programs in 1986. However, since then there has been no other formal evaluation.

Lack of qualified staff. The fifth most frequently mentioned weakness of the B. Ed. Business Studies and Secretarial Studies programs the lack of an adequate number of qualified staff to teach in the B. Ed. programs. The current UTECH President, the Director of Human Resources Management, and the B. Ed. Program Coordinator echoed this same view. As earlier indicated in Chapter Six, some of the instructors recruited to teach in the B. Ed. program are on part-time employment. Furthermore, employing qualified staff for each of the core courses as well as the specialist courses poses a financial problem to the B. Ed. programs.

Lack of research culture. The fifth weakness, lack of a research culture, was identified by the Module Three students (83.3% Business Studies; 75.0% Secretarial Studies programs) and by the graduates (80.0% Business Studies; 81.3% Secretarial Studies programs). According to the former UTECH President, the current UTECH President, the Human Resources Director, the Head of School of Technical and Vocational Education, and the Head of Department of Humanities and Liberal Studies, UTECH lacks behind in the area of research and professional writing. The current UTECH President added that to combat this problem, a position was created under his administration for the post of the Director of Graduate Studies and Research. However, it should be noted that the Faculty of Education and Liberal Studies publishes an annual Communication magazine and a Technical Education Journal.

To be a viable, accepted, and sought after program, there is the need to address the weaknesses identified above. Therefore, it is recommended that *UTECH administrators and the B. Ed program providers (a) provide more financial assistance for needy students, (b) encourage the use of innovative teaching methods by* *instructors, (c) establish clear and standard polices for program implementation, (d) conduct regular needs assessment and program evaluation, (e) employ adequate number of qualified instructional staff, and (f) promote research and academic writing.*

Modular System

Evaluation Question 27: How good is the three-year modular system in meeting the objectives of the B. Ed. Business Studies and Secretarial Studies programs?

To assess how good the three-year modular system is in meeting the objectives of the B. Ed. Business Education programs, six components were examined. These were the modular system and the objectives of the B. Ed. Business Studies and Secretarial Studies programs, the modular system and students characteristics, the problems experienced by the students and the graduates in the modular system, and the perceptions of graduates toward the modular system.

Modular system and B. Ed. program objectives

The students and the graduates were asked to indicate the degree to which the modular system reflected the objectives of the B. Ed. Business Studies and Secretarial Studies programs. A three-point scale (not very reflective, reflective, very reflective) was used. The item means and standard deviations are reported in Table 64.

As shown, the students and the graduates agreed that there was a good fit between the modular system and the objectives. The results of the ANOVA analysis revealed that the graduates were significantly higher in their ratings than the Module Two and Module Three students ($F_{3,234}$ = 4.560; nsd; Table 64, Appendix J). During the focus group discussions, the students agreed that the modular system reflected the objectives of the B.

Ed. Business Education programs. This view was also shared by the B. Ed. Program Coordinator.

Table 64

Item Mean and Standard Deviation of Students and Graduates: Modular System and the B. Ed. Business Education Programs

			Modular System	
Group	Spec.	N	$\bar{X}$	*SD*
Mod.1	Bus.	20	2.10	0.64
	Sec.	15	2.07	0.70
Mod.2	Bus.	24	1.88	0.54
	Sec.	15	1.80	0.41
Mod.3	Bus.	24	1.88	0.54
	Sec.	20	1.95	0.51
Grad.	Bus.	60	2.23	0.77
	Sec.	64	2.22	0.72

1 = Not very reflect, 2 = Reflective, and 3 = Very reflective

Modular system and students' characteristics. The students and the graduates were first asked if they felt that the characteristics of the students in the B. Ed. Business Studies and Secretarial Studies programs were considered by the modular system program developers. As shown in Table 65, between 25.0% and 41.7% of the students and graduates felt that students' characteristics were considered by the modular system program developers. However, between 58.3% and 75.0% of the students and graduates felt that students' characteristics were not considered by the modular system program developers. Further, 72.2% of the instructors also indicated that the program developers did not consider the characteristics of the students in the modular program. The students, graduates, and the instructors who indicated that the program developers did not considered the characteristics of the students in the modular system stated lack of recognition of students' learning behaviors and backgrounds to support their response.

Table 65

Percentage of Students and Graduates on Modular System and Student Characteristics

Group	Specialization	n	NO	YES
Module 1	Business	20	13 (65.0%)	7 (35.0%)
	Secretarial	15	9 (60.0%)	6 (40.0%)
Module 2	Business	24	18 (75.0%)	6 (25.0%)
	Secretarial	15	10 (66.7%)	5 (33.3%)
Module 3	Business	24	14 (58.3%)	10 (41.7%)
	Secretarial	20	12 (60.0%)	8 (40.0%)
Graduates	Business	60	37 (61.7%)	23 (38.3%)
	Secretarial	64	44 (68.8%)	20 (31.3%)
Instructors		18	13 (72.2%)	5 (27.8%)

The students, graduates, and the instructors who indicated that the program developers considered the characteristics of the students in the modular system stated two reasons to support their response. First, they indicated that the modular system at UTECH provided in-service training opportunity for full-time teachers (students). Thus, the students could continue their studies without taking a leave-of-absence from their full-time employment. Second, they stated that the modular system gave the students the opportunity of specializing either in Business Studies or in Secretarial Studies.

Gold-Schmid and Gold-Schmid (1972), stated that:

> the advantage of modular teaching is that it allows students to advance at their pace and leaves them free, first to choose for themselves the learning mode that suits them best, next to identify their strengths and weaknesses,

> and lastly, to retrain themselves by using remedial modules, repeating those they have already used or changing their way of learning. (p. 18)

The advantages of the modular system as stated by Gold-Schmid and Gold-Schmid appeared not to be the case in the B. Ed. Business Studies and Secretarial Studies modular programs as constituted. The students advanced at the pace set by the instructors, were not free to choose the mode of learning that suited them, and were not allowed to change their way of learning. Further, based on the students responses it could be added that consideration was not given to the students strengths and weakness when grouping them for instruction. These findings suggest that the modular system at UTECH did not fully provide the advantages suggested by Gold-Schmid and Gold-Schmid (1972).

When asked, the B. Ed. Program Coordinator, the Head, School of Vocational and Technical Education, and Head, Department of Humanities and Liberal Studies agreed that the modular system at UTECH was not the typical instructional organization found in most institutions abroad. The Head, School of Vocational and Technical Education offered that the modular system was referred to as modular system because it offered students the opportunity of obtaining a degree in three stages over three summers and the following fall/winter terms.

In summary, the percentages of students, graduates, and instructors who indicated that the characteristics of students in the B. Ed. Business Education programs were not considered by the program developers was greater than the percentages who indicated otherwise. Thus, the need exists for the program developers to consider the characteristics of the students when revising the modular system used for the B. Ed. programs. Therefore, it is recommended that *the program planners review the structure of the modular system of the B. Ed. Business Education programs with a view of revising it to* *accommodate the characteristics of the students whom the program was designed to serve.*

Problems Experienced by Students in the Modular System

The students and graduates were asked to identify the types of problems, if any, they experienced with the modular system. The analysis of their responses led to the identification of four major problems: failure to meet individual differences, financial difficulties, excessive workload, and lack of supervision. Reported in Table 66 are the findings.

Financial difficulty. The majority of the students (73.3% to 85.0%) and graduates (70.0% and 73.4%) reported that they experienced financial problems, principally due to increased fees. As earlier discussed on pp. 203-204, the UTECH President indicated that the high cost of fees being faced by students was due to high operating costs. The 50.0% subvention by the government had not been measured. He indicated that the cash flow problem in Jamaica was partly responsible for the failure of the government to increase its subvention. Consequently, part of the increase in operating costs needed to be offset by increasing the students' fee.

According to the B. Ed. Program Coordinator, financial aid is available to students in need and who are making satisfactory academic progress at the time of application. The funds utilized for student financial aid come mainly from the Jamaican Government Student Support Fund, Student Welfare Fund, and Harvard Business Club. Three types of financial assistance are provided: grants without repayment, emergency loans (repayment within specified time frames), and part-time employment (through the University Earn and Study Program). Despite this aid, the majority of students still indicated that they experienced financial difficulties. Therefore, to reduce the financial difficulties faced by students, it is recommended that *the B. Ed. program administrators review the yearly increase of fees for the students in the programs with a view of reducing them and seeking more government subvention.*

Table 66

Percentage of Students and Graduates and Types of Problems Experienced in the Modular System

	Type of Problems			
Specialization	Financial Difficulty	Excessive Workload	Failure to Meet Individual Differences	Lack of Supervision
Module One:				
Business	17 (85.0%)	12 (60.0%)	10 (50.0%)	5 (25.0%)
Secretarial	11 (73.3%)	10 (66.7%)	8 (53.3%)	3 (20.0%)
Module Two:				
Business	19 (79.2%)	17 (70.8%)	18 (75.0%)	15 (62.5%)
Secretarial	12 (80.0%)	11 (73.3%)	9 (60.0%)	10 (66.7%)
Module Three:				
Business	17 (85.0%)	21 (87.5%)	13 (54.2%)	18 (75.0%)
Secretarial	15 (75.0%)	18 (90.0%)	11 (55.0%)	16 (80.0%)
Graduates:				
Business	42 (70.0%)	51 (85.0%)	38 (63.3%)	49 (81.7%)
Secretarial	47 (73.4%)	59 (92.2%)	41 (64.1%)	54 (84.4%)

Excessive workload. As shown in Table 66, there was an increase in the number of students in both programs across the three modules (60.0% to 90.0%) who indicated that their workloads were too heavy. The percentages of graduates who reported the same were comparable to the percentages for the Module Three students.

When asked about the workload, the Head of School of Technical and Vocational Education, the Head of the Department of Humanities and Liberal Studies, and the B. Ed. Program Coordinator all agreed that the workload in the summer component was heavy. Previously it was reported that the students in the Business and Secretarial Studies programs receive 28 hours of lectures per week for six weeks in Module One, 27 hours and 28 hours per week, respectively, in Module Two, and 23 hours and 22 hours per week, respectively, in Module Three. Given this time in class, the students, particularly those who needed to travel from and to home, had little time to complete assignments and prepare for examinations. To reduce this problem, it is recommended that *the B. Ed. program administrators review the workload for the students with a view of either reducing the contact hours or by extending the length of the program.*

Failure to meet individual differences. As shown in Table 66, from 50.0% to 75.0% of the students and 63.7% of the graduates indicated that individual differences among the students were not recognized. For example, during the focus group discussions, some of the students indicated that students who experienced difficulties in the modular system were not given individual or extra attention during instruction. The students added that the students with difficulties were not provided with the opportunity to advance at their own speed. Further, they added that for this reason, there was a high drop out rate in the program. This latter comment helps explain the lower than what might be the expected success rate (see pp. 222-224). To reduce the high drop out rate, it is recommended that *the B. Ed. program developers at UTECH review the nature of the modular system with a view of ensuring that the learning needs of all students are better accommodated.*

Lack of supervision. While the students in Module One did not see the lack of supervision as a problem, the majority of the students in Modules Two and Three and the graduates indicated that the lack of supervision was a problem. The Modules Two and Three students indicated that the number of consulting hours with their instructors was inadequate and that the instructors were not always available during posted consultation hours (see pp. 163-165). In the case of the graduates, a second major issue was the difficulty in finding supervisors for their research projects and, when found, arranging meeting with their supervisors. As earlier indicated, the B. Ed. Program Coordinator expressed difficulty in finding supervisors for the students (see p.113). To reduce this, it is recommended that *strong efforts be made to recruit more instructional staff and research supervisors for students in the B. Ed. programs.*

Reasons to Withdraw from the Modular System

To assess the factors that might contribute to students withdrawing from the B. Ed. Business Education programs, the students were asked to identify three factors from a list of seven in their surveys. Interestingly, the possible factors that would lead to the withdrawal of students from the B. Ed. Business Education programs were similar to the factors identified by the students and the graduates as the problems they experienced in the B. Ed. programs. Reported in Table 67 is a summary of the findings.

Pace of instruction. The first most frequently listed reason to withdraw was the pace of instruction. With the exception of on each group, at least 83.0% of the students indicated that they might withdraw from the B. Ed. Business Education programs due to the fast pace of instruction. Again, this point was reechoed by all the students during the focus group discussions.

Table 67
Percentage of Students on Reasons to Withdraw from the B. Ed. Business Education Programs

	Reasons to Withdraw				
Group	Pace of Instruction	Accommo dation/ Travel	Financial Problem	Heavy Workload	Lack of Motivation to Study
Module 1:					
Business	15 (50.0%)	10 (50.0%)	10 (50.0%)	18 (90.0%)	7 (35.0%)
Secretarial	15 (100%)	7 (46.7%)	11 (73.3%)	10 (66.7%)	2 (13.3%)
Module 2:					
Business	24 (100%)	20 (83.3%)	14 (58.3%)	10 (41.7%)	4 (16.7%)
Secretarial	13 (80.0%)	11 (73.3%)	10 (66.7%)	7 (46.7%)	5 (33.3%)
Module 3:					
Business	20 (83.3%)	18 (75.0%)	20 (83.3%)	8 (33.3%)	6 (25.0%)
Secretarial	18 (90.0%)	17 (85.0%)	15 (75.0%)	8 (40.0%)	2 (8.3%)

Accommodation and travel. The second most frequent reason to withdraw identified by the students was accommodation and travel. As reported in Table 67, from 46.7% to 85.0% of the students indicated that they might withdraw from the modular system of B. Ed. Business Education programs due to accommodation and travel problems. Again, this point was reechoed by all the students during the focus group discussions.

Financial problem. The third most frequent listed reason to withdraw was financial problems. From 50.0% to 83.3% of the students indicated that they might withdraw from the modular system of B. Ed. Business Education programs due to financial problems. As earlier indicated, the students expressed a concern regarding the yearly increase in fees in the B. Ed. Business Education programs.

Heavy workload. As shown in Table 67, more students in Module One than in Module Two and Module Three indicated that they might withdraw from the modular system of the B. Ed. Business Education programs because of the excessive workload in the programs (66.7% to 90.0% versus 33.3% to 40.0%). As indicated earlier, the students expressed a concern about the workload and length of the B. Ed. Business Education programs.

Motivation to study. As shown in Table 67, a few students (8.3% to 35.0%) indicated that they might withdraw from the B. Ed. Business Education programs due to their own lack of motivation to study.

In summary, the reasons identified by the students that might lead to their withdrawal from the B. Ed. Business Education programs should be carefully considered by the B. Ed. program administrators. Thus, it is recommended that *the B. Ed. program administrators (a) review the pace of the program with a view of extending the length of the program from six weeks to seven weeks of classes, (b) ensure that students are adequately accommodated on campus, (c) ensure that the students who are offered admission are given financial assistance, (d) ensure that the students workload is in congruent with the program length, and (e) ensure that the instructors use stimulating methods of delivery in motivating the students to learn.*

Benefits of the Modular System

The graduates of the B. Ed. Business Studies and Secretarial Studies programs were asked to indicate the benefits they saw from completing their programs. They were provided with a list of five potential benefits and asked to select three. An "other" category was provided in case a graduate wanted to identify a benefit other than the five listed. No one provided an "other" suggestion. The number of graduates in each specialization and their percentages are provided in Table 68 for each of the five potential benefits.

Table 68
Percentage of Graduates on Benefits of the Modular System in the B. Ed. Business Education Programs

	Benefits				
Group	Convenient for Teachers	Modular System	Specialist Option	Low Cost of Studying	Study Pace
Graduates:					
Business	60 (100%)	60 (100%)	52 (86.7%)	7 (11.7%)	1 (1.7%)
Secretarial	64 (100%)	64 (100%)	50 (78.1%)	10 (15.6%)	4 (6.3%)

All the Business Studies graduates and Secretarial Studies graduates selected convenience and part-time study over three years as benefits of the modular system. Fifteen-two (86.7%) Business Studies graduates and 50 (78.1%) Secretarial Studies graduates indicated that the modular system allowed students to specialize in Business Studies or Secretarial Studies. Only 7 (11.7%) Business Studies graduates and 10 (15.6%) Secretarial Studies graduates selected lower cost as a benefit of studying in the modular system. Less than 2.0% Business Studies graduates and 4 (6.3%) Secretarial Studies graduates selected time and pace as one of the benefits of the modular system.

The benefits identified by the graduates were similar to the factors identified as the strengths of the B. Ed. Programs by the students, graduates, instructors, senior administrative and academic staff, and the officers of the funding agencies. These findings reveal that there is a need to establish a framework to ensure the continuity and enhancement of these strengths and benefits for the students and the communities in which the graduates work.

Students' and Graduates' Confidence in the Modular System

The students and graduates were asked to indicate how confident they were about using the modular system at UTECH. The item means and item standard deviations for the students and graduates are provided in Table 69.

Table 69
Item Mean and Standard Deviation of Students and Graduates Confidence in Using Modular System of the B. Ed. Business Education Programs

			Confidence in Modular System	
Group	Specialization	n	$\overline{X}$	*SD*
Module 1	Business	20	2.80	1.01
	Secretarial	15	2.47	1.13
Module 2	Business	24	2.58	0.72
	Secretarial	15	2.87	0.52
Module 3	Business	24	2.75	0.79
	Secretarial	20	2.37	0.68
Graduate	Business	60	2.65	0.55
	Secretarial	64	2.91	0.75

1 = Not at all confident, 2 = Not very confident, 3 = Confident, and 4 = Very confident

As shown in Table 69, the students and graduates were somewhat uncertain about their confidence in using the modular system. The results of the ANOVA analysis revealed that there was no statistical significant difference among the three student groups and the graduates ($F_{3,234} = 1.057$; nsd; Table 69, Appendix J). During the focus group discussions, both the Business Studies and Secretarial Studies students indicated that their lack of confidence in the modular system was attributable to the problems they experienced in the program.

The B. Ed. program administrators were unwilling to comment on the views of the students. Thus, the need exists for the *B. Ed. program administrators (a) to build students confidence by ensuring that students needs are better met in the B. Ed. programs, and (b) by finding solutions to the problems identified by the students and the graduates.*

CHAPTER NINE

SUMMARY, OVERVIEW OF RECOMMENDATIONS, AND CONCLUDING COMMENT

Presented in this chapter is a summary of the study, including the purpose, methods followed, and description of the limitations of the study. A summary of the findings and recommendations is then provided, followed by the concluding comment drawn in light of the findings and recommendations. The chapter concludes with recommendations for practice and future evaluation studies at UTECH.

Summary of the Study

Since the inception of the B. Ed. Business Studies and Secretarial Studies programs at the University of Technology, Jamaica (UTECH) in 1982, there has been an absent of a formal independent evaluation to verify the effectiveness of these programs. To address this lack of a systematic evaluation, the present study was conducted. The general evaluation question was: "How effective are the B. Ed. Business Studies and Secretarial Studies programs in the preparation of graduates for the practical demands of their teaching occupation?" To provide an answer to this general evaluation question, 27 specific evaluation questions were addressed. These questions were organized in terms of the Context, Input, Process, and Product (CIPP) components of the evaluation model proposed by Stufflebeam (1971).

The CIPP model was selected for this study because the aim of this model is not to "prove" but to "improve" programs (Stufflebeam et al., 1983). The objects of the evaluation were the B. Ed. Business Studies and Secretarial Studies programs offered at UTECH. Located in the Faculty of Education and Liberal Studies, the programs are organized in terms of three consecutive modules, where each module consists of a seven week instructional summer component and a fall/winter seminar (Modules One and Two), work experience component (Module Two), and research project (Module Three) component.

The target population consisted of the different stakeholders with an interest or stake in the B. Ed. Business Studies and Secretarial Studies programs. The final sample included students (n = 130); graduates (n = 124); instructors (n = 18); the current and former Presidents, Academic Vice-President, Director of Human Resources, Dean of the Faculty of Education and Liberal Studies; Head of School of Technical and Vocational Education; Head of the Department of Humanities and Liberal Studies; and B. Ed. Program Coordinator. Further, 63 principals of the schools in which the graduates work and the officials of two funding agencies (the Ministry of Education and Culture, n = 3); and the Canadian International Development Agency, n = 1).

A multi-method, multi-source data collection procedure was employed to collect the data, with the same or similar data collected from different, but appropriate sources. Documents located in B. Ed. degree office and UTECH records office were reviewed and analyzed. Five questionnaires were administered. These included three different questionnaires for the students in the three modules, a questionnaire for the graduates, and a questionnaire for the instructors. A semi-structured interview was conducted with each of the senior UTECH officials, the administrators of the two programs, and the officials of the funding agencies. Focus group discussions were held with the students in each module. Two classes in six courses in each summer component were observed using an observation scale. Lastly, an appraisal scale, completed by the principals, was used to evaluate the graduates' teaching performance. In all cases, the items included in each instrument were referenced to one of the four components of the CIPP model.

Item means and standard deviations were computed for each of the measured variables. To determine whether or not there were differences among the students, grouped by module, and the graduates on the same items, a k x 2 (modules/graduates-by-program specialization) fully crossed, fixed effects ANOVA was used. The value of k was 2, 3, or 4 depending on the number of groups asked the item. The Bonferroni post hoc test was used when k = 3 or 4 and the group effect was significant. Based on the value of the internal consistency, the decision was made on how the items were to be analyzed. While the initial intent was to analyze items in pre-determined sets, only the sets of items with Cronbach's alpha greater than or equal to 0.53 were retained as sets. The remaining sets were disaggregated and the analyses performed at the item level. All inferential tests were conducted at 0.01 level of significance to maintain a realistic error rate. The responses to instructors questionnaires, the observation scales, and the demographic data collected using surveys for the students and graduates were analyzed with descriptive statistics. All the interview data were transcribed. The transcribed interview data and the data obtained from the document reviews were sorted into the four categories of the CIPP model.

Limitations

Three limitations were encountered during the conduct of this study. First, one member of the senior administrative staff involved in the planning and implementation of the B. Ed. Business Education programs refused to be interviewed, indicating that he had a busy schedule. The participation of the former UTECH President compensated for this person's non-response. His responses to the interview questions provided useful information on the planning and implementation of the B. Ed. programs. Further, one of the senior academic staff members who participated in the study refused to answer most of the interview questions. Second, the lack of adequate records management prevented the evaluator from accessing some records on the B. Ed. Business Education programs and the students. Lastly, the B. Ed. Business Education programs summer component was offered for seven weeks during the summer. This time frame did not allow sufficient time to observe classes in all the courses taught.

Summary of the Findings and Recommendations

Listed below are the major findings of the study. The findings are accompanied a recommendation(s) where a recommendation was called for. These recommendations are presented in italics to set them apart from the findings. The presentation is organized in terms of the CIPP model.

Context Evaluation

A. Mission Statement

1. There is no specific mission statement for the B. Ed. Business Studies and Secretarial Studies programs. Instead, there is one mission statement for all the B. Ed. programs offered by the Faculty of Education and Liberal Studies.
2. Except for the incorrect identification of the Faculty of Education and Liberal Studies as the Department of Technical Teacher Education, the mission statement is like that of other mission statements found in education institutions.

   The program administrators of the B. Ed. Business Studies and Secretarial Studies programs consider revising the statement so that it correctly identifies the

Department as the Faculty of Education and Liberal Studies and not as the Department of Technical Teacher Education.

3. The students, administrative staff, and officials of the funding agencies were not aware of the mission statement of the B. Ed. programs.

   The program administrators of the B. Ed. Business Studies and Secretarial Studies programs consider ways to ensure that the mission statement becomes better known by all the relevant stakeholders, for it to be more influential and effective in guiding the faculty in the development of programs and instructional process.

B. B. Ed. Business Education Programs Philosophy

1. The students to be served, what knowledge and skills are to be acquired, and the level of performance expected of the students to be served were stated.
2. No document was found to identify the members of the team who formulated this philosophy and when it was formulated. Thus, it is not known to what extent program administrators, instructors, students, and representatives of future employers were involved in the development of the programs' philosophy.
3. The philosophy and mission statement are congruent with each other and together provide direction.

C. Learning Objectives

1. There are no specific objectives for the B. Ed. Business Studies and Secretarial Studies programs. Instead, a general set of objectives is provided for all B. Ed. degree programs offered by the Faculty Education and Liberal Studies.

2. Objectives one, three, four, and six appear to fit well with the mission statement and philosophy for the Business Studies and Secretarial Studies degree programs. Objectives two and five fit less well.

(a) The program administrators of the B. Ed. Business Studies and Secretarial Studies programs consider revising the mission statement and/or philosophy to incorporate the Caribbean region as indicated in the second objective. And (b) the program administrators of the B. Ed. Business Studies and Secretarial Studies Programs consider revising the statement Objective five by "sharpening" what is meant by general knowledge so that this objective is clarified and not open to misinterpretation.

D. Expected Student Outcomes

The 10 expected learning outcomes reveal quite clearly what knowledge and behaviors the students are expected to learn and acquire.

E. Students to be Served

1. The B. Ed. Business Studies and Secretarial Studies programs were intended to serve teachers who had completed the CAST/UTECH Teacher Diploma in Business Education or a Business Education Diploma in another teacher training college in Jamaica or in the Caribbean region.

2. The two programs were intended for supervisors in the Ministry of Education who needed to up-grade their qualifications in order to better assist the Ministry of Education in the development, implementation, and supervision of Business Education programs in the high schools.

Input Evaluation

A. Governance and Administrative Structure

1. The governance and administrative structure for the B. Ed. summer programs in Business Studies and Secretarial Studies has five levels beginning at the top with the University Council and ending with the Division Heads.

2. The governance and administrative structure of programs is not particularly efficient for the B. Ed. Business Studies and Secretarial Studies programs as the nature of these two programs is different from other programs offered at UTECH.

3. The administrative style was found to be complex and slow in responding to the demands of the students.

   The program administrators of the B. Ed. Business Studies and Secretarial Studies programs consider ways to make administrative structure of the B. Ed. summer degree programs at UTECH more responsive to the special needs of the students who attend these programs.

4. There is lack of standard rules and policies within the organization.

   The program administrators of the B. Ed. Business Studies and Secretarial Studies programs consider ways of providing standard administrative rules and policies within the organization which could enhance the speed of responding to the demands of the students.

B. Intended and Actual Curricula

1. A program proposal for the B. Ed. Business Studies and Secretarial Studies programs was prepared in 1979 by local team and three consultants from universities in the United States.

2. The qualifications of the present teaching staff essentially met the intended qualifications: 19 of the 22 present staff members possess at least a Master's degree.

   The B. Ed. program administrators ensure that each instructor in the B. Ed. summer programs possesses a Master's degree before teaching in the program.

D. Resources Available

1. The library holdings are not sufficient.

   The B. Ed. program administrators should (a) ensure that at least one textbook for every 10 students in a class be made available in the library, and (b) journals are received in a more timely way for all the courses offered in the B. Ed. Business Studies and Secretarial Studies programs.

2. The instructional space for the B. Ed. summer component is insufficient.

   There is a need for UTECH administrators to examine the instructional space made available for the B. Ed. programs during the summer component and work to increase the number of classrooms in the Faculty of Education and Liberal Studies during the summer component.

3. The number of computers appears to be sufficient to satisfy the needs of the students. The number of printers and software programs provided in the computer labs for the students B. Ed. Business Studies and Secretarial Studies programs appear to be insufficient.

   The B. Ed. program administrators should review the facilities provided in each of the computer labs to ensure that the number and type of computer software provided for the B. Ed. summer component is adequate and up-to-date.

4. The audio-visual equipment is inadequate.

The UTECH administrators to examine the number of audio-visual devices (e.g., overhead projectors and screens) made available for the B. Ed. Business Studies and Secretarial Studies programs with a view of increasing the number.

5. There were no staff-rooms for the part-time instructors who taught in the Business Education programs. Secondly, the staff-rooms for the full-time instructors failed to provide the privacy needed for academic work in the office.

Office spaces in the B. Ed. degree programs be improved in order to provide accommodation for all teaching staff and to maintain the privacy needed for academic work in the office.

E. Student Entry Requirements

i. UTECH has flexible entry policy. The request to access students' admission records to verify the selection process was denied by the Admission Office at UTECH due to the need to maintain confidentiality. Therefore, the degree to which the selection process adhered to the entry requirements could not be directly assessed.

There is a need to ensure that the selection process is fully adhered to and that entry requirements into the B. Ed. programs are fully met instead of the flexible entry policy used to admit students into the programs.

Process Evaluation

A. B. Ed. Program Orientation

The orientation was provided to students at the beginning of their programs. The orientation program and registration took place at the same time.

The administrators of the B. Ed. programs review the orientation procedure and its overlap with the registration to ensure a positive experience for all incoming students.

B. Summer Courses

1. Course objectives were not provided to the students for five courses (one course in Module One, two courses in each of Module Two and Module Three[3]).

Clearly stated and relevant course objectives be provided for each course without fail and that the objectives reflect the expectations and needs of the students and their employers.

2. The objectives provided were congruent both with what the students expected and needed, and with the students' and employers' needs and expectations.

3. Only one course among each of the courses offered in Module One and Module Three and two courses in Module Two were adequate to students' needs. The remaining courses need to be improved.

The B. Ed. program administrators have each course evaluated by evaluators in the subject area and from outside of the University with the intent of providing constructive feedback that can be used to improve the courses offered.

C. Fall/Winter Seminars

1. The students identified four concerns with the seminars.

    a. Difficulties to get time off from school to attend the seminars;

    b. Preparing for the seminars interfered with their regular full-time teaching jobs;

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[3] The courses are not identified to protect confidentiality of the instructors.

c. For some seminars, the instructors were ill prepared and did not show much enthusiasm; and

d. Some seminar sessions began late.

(a) The B. Ed. degree program administrators meet with the presenters of these seminars with a view of revising the presentations to include more hands-on experience for the students, (b) steps be taken to ensure that the seminar presentations are interesting and stimulating, (c) the work schedule of the students should be considered when scheduling the seminar, and (d) employers become more involved in the operation of the program, perhaps through representation on a new advisory board, so that they are more aware of what is expected of them.

D. Utility of Work Experience

1. There were difficulties in placing students in the right work experience situations.

The B. Ed. program planners start early to identify and approach the possible establishments where students can be placed for the work experience. This can be achieved by getting the heads of the establishment involved in the operation of the B. Ed. programs so that they would more aware of the intent and purpose of the work experience component and the need to have the students complete their teaching duties.

E. Overlap Course Contents

The Research Methods 2 and Educational Measurement courses overlap. The overlapped topics included measurement scales, graphs, reliability and validity, and measures of central tendency, variability, and relationships.

The Research Methods 2 and Educational Measurement courses be reviewed with the intent of removing what appears to be rather extensive overlap between these two courses.

F. Importance and Relevance of Courses

1. All Module One courses are important and relevant except for Data Processing 1 and Seminars.

   The B. Ed. program planners revise the Data Processing 1 course to include content that is related to what the graduates of the B. Ed. Business Education programs will teach in the high schools.

2. There was not have enough time for students to learn the skills needed for the Communication Skills and the Research Methods 1 courses.

   The B. Ed. program planners review the length of the summer component with a view to increasing it in order for the students to have more time to learn the communication skills needed to be a good Business teacher and the skills needed to conduct a research study.

3. All Module Two and Module Three courses were important and relevant to the students teaching jobs.

4. There is lack of Caribbean Economy textbooks in the library.

   The Librarian review the book collection for the Caribbean Economy course with a review to increasing it for the students to have more textbooks for this course.

F. Quality of Instruction

1. The quality of teaching was adequate and that the level of instruction appropriate.

2. There was a lack of variety in the teaching approaches employed by the instructors and that some of the approaches were not appropriate for the particular content to be learned.

   A formal instructor evaluation system be put in place. This system should include both an evaluation by students and a peer evaluation.

G. Adequacy of Instructors' Consultations with Students

1. The number of consulting periods with the instructors was not adequate, and some of the instructors were not available during posted consultation hours.

   (a) The B. Ed. program administrators ensure that the part-time instructors are provided with office space where consultations can take place with their students, and (b) review the number of consulting hours for the instructors and the students with a view of increasing the number.

H. Few instructional staff appear to be involved in academic research and professional writing.

   (a) The senior academic staff should encourage the instructors to remain current in their field by becoming involved in research and professional writing, and (b) work with the faculty to integrate the student information into the faculty member's instructional planning and teaching.

I. Quality of Student Evaluation Procedures

1. Few instructors appear to discuss the methods of assessment to be used with their students.

   The course outline for each course contain not only the objectives or expected learning outcomes for the course but also the assessment methods to be used to *collect the evidence needed to determine if the students have acquired the knowledge and skills to be learned.*

2. Assessment methods are restricted for the most part to in-class testing and final examinations.

   The program administrators of the B. Ed. programs should organize a workshop on assessment techniques for all instructors of the B. Ed. without an education degree.

3. While assignments are helpful, there is a concern regarding the number of assignments given the available time to complete them.

   The program administrators review the length of program with a view of increasing the time to allow students the adequate time to complete the assignments required for the two B. Ed. Business Education programs.

4. The time between the end of the courses and the start of the examinations is not sufficient to allow students to prepare adequately for their examinations.

   The B. Ed. Program Coordinator work with the faculty to include a one-week study break prior to the beginning of the final examination.

5. The examination conditions are uncomfortable because the classrooms are hot and/or noisy during the examinations.

   (a) The B. Ed. Program Coordinator work with the maintenance unit of the university in seeing that the fans in the classrooms are functioning, and (b) ensuring that noise level around the classrooms are kept low during the examination period.

6. Not all instructors provide immediate feedback following an assessment. Likewise, the faculty are late in communicating the students' final grades. Concerns were expressed about misplaced assignments.

The Faculty of Education and Liberal Studies to (a) ensure that students receive their progress reports on time, and (b) ensure that students' papers are carefully stored away to avoid misplacement.

J. Quality and Adequacy of Resources

1. The quality and adequacy of teaching materials is poor.

The teaching materials and equipment be provided to a level commensurate with the needs of students and instructors.

2. Needed books and periodicals are not always available because borrowed materials are not always returned to the library.

The senior administrators at UTECH and the librarian develop and enforce a "return policy" to ensure that books and periodicals borrowed are returned by their users within a time frame.

3. The number of books and periodicals in the library is not adequate for all courses.

The number of books and periodicals for the courses offered in the B. Ed. Business Studies and Secretarial Studies programs be increased in order to ensure that there is an adequate coverage and number for the students and their instructors to use.

4. Students and graduates are unable to make adequate use of the library due to the lecture schedule during the summer component.

The B. Ed. Program Coordinator and the Librarian work out a timetable that would allow the students make adequate use of the library during the summer component.

5. Some of the classrooms and lecture theatres are very hot and unclean, and the chairs are uncomfortable and tables are not always clean.

   It is recommended that *the B. Ed. program planners and the Department of Housing Services (a) ensure that the fans in the classrooms and air conditioners in the lecture theatres are functioning, and (b) increase the number of cleaning support staff to clean the classrooms during the summer component.*

6. The size of the B. Ed. office is small, and the records management is poor.

   The B. Ed. program administrators consider providing a larger office space.

7. The reading space for students in the Faculty of Education and Liberal Studies is inadequate.

   The B. Ed. program administrators consider providing a reading room for students in the Faculty of Education and Liberal Studies.

8. Some of the computers in the two computer labs in the Faculty of Education and Liberal Studies are old and were not functioning at the time of the evaluation; the printers are often not available for the students to use.

   The B. Ed. program administrators (a) ensure that the computers provided in the labs are up-date-to date and in good working condition, and (b) and ensure that additional printers are provided for students use.

9. The two computer labs in the Faculty of Education and Liberal Studies are closed after office hours, preventing students from working late.

The concerns of the students on gaining access into the computer labs located in the Faculty of Education and Liberal Studies after office hours be considered by the B. Ed. program administrators.

10. Students services such as financial aid offered to B. Ed. students and hostel accommodation are inadequate. The students expressed three concerns:

    a. Hostel accommodation is not comfortable because the rooms small;

    b. The students are not allowed to bring in their personal computers; and

    c. The cost of hostel accommodation is very high.

    The B. Ed. program administrators consider (a) provide comfortable hostel accommodation for the B. Ed. students, (b) allow the students use personal computers for their academic work, and (c) revise the cost of hostel accommodation.

K. Factors Enhancing the Implementation of the B. Ed. Programs

1. Summer program. Summer break provides an opportunity for teachers with a Diploma in Business Education to obtain a degree without having to leave their full-time jobs.

2. Courses offered. Courses offered in the B. Ed. degree in Business Education programs are the only one in Jamaica.

3. Modular system. The modularization of the B. Ed. programs into a three parts and over three summers parts provides students with the opportunity of progressing from one module to the next within three summer components

4. Qualified staff. Fifteen of the 18 instructors possess at least a Masters' degree the minimum degree required to teach in the B. Ed. Business Education programs.

L. Factors Affecting the Implementation of the B. Ed. Programs

1. High fees. Students fees are very high.

2. Length of program. The length and pace of the programs are inadequate for the students to assimilate what they have been taught.

3. Records management. The state of records management in the B. Ed. degree office is inadequate.

4. Construction noise. Construction noise around and within the faculty building during the summer component affects both lectures and examinations.

(a) The administrators of the B. Ed. Business Education programs examine the possibility of ensuring that the increase in student fees be reasonable, (b) examine the length of the program with a view of increasing it, (c) ensuring that the records and documents pertaining to the B. Ed. programs are properly stored and protected, and (d) ensuring that the construction noise is reduced during the summer program.

M. Future Threats to the success of B. Ed. Programs

1. Program quality. The quality of B. Ed. programs offered is not commensurate with the fees paid by the students, therefore poses a threat to the implementation of the B. Ed. programs in the future.

2. Other programs. Other colleges within and outside Jamaica are strong competitors to the B. Ed. programs. The off-shore US programs offers degree programs in Business Administration and/or Business Management programs with better incentives for students.

3. Accreditation. Not having the B. Ed. programs accredited by the University Council of Jamaica (UCJ) acts as a future threat to the success of the B. Ed. programs.

4. Quality of resources. The quality and adequacy of resources provided for students and instructors in the B. Ed. programs are not high and therefore poses threat to the future of the B. Ed. programs.

   The B. Ed. programs ensure that (a) the quality of program be improved, (b) ensure that the B. Ed. programs be accredited by UCJ, and (c) the quality of resources be improved.

Product Evaluation

A. Students Academic Performance

1. The performance of the Business Studies and Secretarial Studies students on assignments is good, test performance is fair, and examination is between average and excellent.

2. The students' overall performance is between average and excellent.

3. The performance of the B. Ed. Business Studies students is better than the performance of the Secretarial Studies students, the Home Economic: Foods students (Clothing students, and the Technology: General Technology students and Industrial Technology.

4. Graduation rates are somewhat low.

   (a) The B. Ed. program administrators conduct an outcome study (Bower & Myers, 1976) to identify reasons for lower completion rates in the B. Ed.

programs, and (b) to monitor the efficiency of operations within the B. Ed. programs.

B. Students' and Graduates' Attitude Toward B. Ed. Programs

1. Students class attendance is fairly good, and they utilize their time in the program effectively. However, the number of instructor contact hours seems higher.

   The B. Ed. program administrators review and possible revise the number of "instructor contact and student committed time or learning time" (Theodossin, 1986, p. 13).

2. The students and the graduates have positive attitude toward studying in the B. Ed. programs. However, a few of the graduates indicated that they did not like the type of training they received.

   The program administrators work with the students to clarify areas of discontent so as to increase the attitudes of the students.

C. Level of Performance of the Graduates

1. The graduates job performance is above average.
2. The graduates are perceived strong in administrative matters, assessment of the students they teach, use of computers, student counseling, poise and appearance, sports activities, and teaching.
3. The graduates are perceived to be weak in the adapting to the needs, of computer skills, communication skills, lessons planning, professionalism, using and conducting research, resentment toward supervision, using a variety of teaching methods, and using visual aids to enhance their teaching.

4. The graduates' job performance is between average and strong when compared to other teachers.

   The B. Ed. Business Education program planners include the use preparation of visual aid in the B. Ed. Business Education curriculum; teaching methods; and writing lesson plan.

5. The graduates educational training is perceived adequate when compared to other teachers.

   (a) The B. Ed. Business Education program planners improve the present Data Processing 1 and 2 curricula, and (b) the communication curriculum be improved.

6. The graduates' attitude to work is acceptable.

   The B. Ed. Business Education program administrators address the issue of professionalism in the graduates.

D. Success Rate

1. The B. Ed. Business Studies and Secretarial Studies programs have an average success rate. However, to be able to assess the success rate more accurately, an accurate and reliable records management is needed.

   The B. Ed. program administrators (a) revise supervision of research project to determine the best way to assist students in completing their projects and the program, and (b) improve the records management for the two programs.

2. A total of 171 Business Studies students have been admitted, and a total of 116 Business Studies students have so far graduated. This result revealed that 55 (32.2%) of the students did not complete the Business Studies program.

3. A total of 240 Secretarial Studies students have been admitted, and a total of 172 Secretarial Studies students have so far graduated. This result revealed that 68 (28.3%) of the students did not complete the Secretarial Studies program.

   (a) The B. Ed. program developers at UTECH review the nature of the modular system with a view of ensuring that the learning needs of all students are better accommodated. (b) An attrition study should to be conducted.

E. Strengths and Weaknesses

1. The strengths of the B. Ed. Business Education programs identified by students, graduates, instructors, administrators, and funding agencies include:
   a. Teacher training opportunities;
   b Courses offered in the programs;
   c. Demand for graduates;
   d. Job advancement of graduates;
   e. Summer/in-service opportunities; and
   f. Promoting international relations within the Caribbean regions and beyond.

2. The weaknesses of the B. Ed. Business Education programs identified by students, graduates, instructors, administrators, and funding agencies include:
   a. Lack of research culture;
   b. Lack of needs and program assessment;
   c. Lack of qualified staff;
   d. Limited financial assistance for students;
   e. Lack of innovation of teaching methods; and

f. Lack of administrative policies.

(a) The B. Ed program providers promote research, conduct regular program assessment, employ qualified staff, provide financial assistance for needy students, encourage the use of innovative teaching methods by instructors, and (b) establish standard polices for program implementation.

F. Modular System and Program Objectives

1. The modular system reflects the objectives of the B. Ed. Business Education programs.

2. The students in the B. Ed. are well behaved and have good working relationship with each other in the B. Ed. programs.

3. The characteristics of the students in the B. Ed. programs were not considered by the B. Ed. program planning while developing the programs.

   The program planners review the structure of the modular system of the B. Ed. Business Education programs with a view of revising it to accommodate the characteristics of the students whom the program was designed to serve.

4. The percentages of students and graduates who experienced problems in the B. Ed. Business Education programs are more than the percentages who did not experience problems.

   The B. Ed. program developers give attention to the problems faced by students in the B. Ed. Business Education programs.

5. Lack of financial aid, heavy workload, and problems with their research supervisors are some of the problems facing students.

The B. Ed. program administrators (a) review the cost of fees for the students in the program, (b) review the workload for the students with a view of either reducing the contact hours or by extending the length of the program, and (c) strong efforts be made to recruit more instructional staff and research supervisors for students in the B. Ed. programs.

G. Reasons to Withdraw

The students might withdraw due to the following workload, accommodation and travel problems, financial problems, lack of motivation to study, and pace of the program

The B. Ed. program administrators (a) review the pace of the instruction with a view of extending the length of the program, (b) ensuring that students who are offered admission are given financial aid, and (c) ensuring that the students are accommodated on campus.

H. Students' and Graduates' Confidence in the Modular System

The students and graduates confidence in using the modular system is not high.

The B. Ed. program administrators to restore students confidence by ensuring that students needs are met in the B. Ed. programs.

I. Benefits of the Modular System

The benefits identified are similar to the factors identified as the strengths of the B. Ed. Programs, that is, courses offered in the program, time of the year the program was offered (summer), nature of the degree offered (B. Ed. Business Studies and B. Ed. Secretarial Studies), and the modular system.

Concluding Comment

As with any instructional program, there are both strengths and weaknesses of the present B. Ed. Business Studies and Secretarial Studies programs. However, in the present case, the weaknesses far out numbered the strengths. Earlier, the general evaluation question was stated as "How effective are the B. Ed. Business Studies and Secretarial Studies programs in the preparation of graduates for the practical demands of their teaching occupation?" While the objectives and, especially, the expected student outcomes are seen as acceptable, the overall quality and support for the program and its components are, on balance, somewhat poor and inadequate. Further, the graduation rate is not as high as it should be and those who do graduate do not posses all of what is reflected in the objectives and expected students outcomes and what is expected by the employers, the principals of the schools in which the graduates teach.

Earlier, it was stated that the justification for selecting the CIPP model for this evaluation was its purpose, namely, "not to prove" but to "improve" programs (Stufflebeam et al., 1983). The recommendations listed above and derived employing the CIPP model were presented with this intent. These recommendations should be considered by both the administrators of UTECH and, more especially, those responsible for the maintenance and operation of the B. Ed. Business Studies and Secretarial Studies programs.

An ancillary purpose of the present study was to see if the CIPP model could be successfully used to evaluate tertiary programs at UTECH and, more generally, at other post-secondary institutions in Jamaica. The experience of using this model to evaluate the

B. Ed. Business Studies and Secretarial Studies programs and the findings and recommendations gleaned from the process of the model support its future use.

Recommendations for Future Evaluation Studies

In the present study, the CIPP model was used to evaluate the B. Ed. Business Education programs and to see if it could be an evaluation model for UTECH. The four stages of the CIPP model provided to be useful for conducting the present evaluation study. Furthermore, a more comprehensive evaluation can be achieved by specifically addressing each of the four components. An issue that did arise was the length of the questionnaires for the students, graduates, and instructors. Therefore, what needs to be revised are the questionnaires used in the present study. These questionnaires need to be shortened and revised to more efficiently capture the information needed to evaluate a program. With respect to the B. Ed. Business Studies and Secretarial Studies programs further work is needed. This work includes:

1. Given the findings of the present evaluation of the B. Ed. Business Studies and Secretarial Studies programs, it appears that an on going needs assessment to determine additional programs is required. This assessment should involve all senior administrators for better effectiveness;
2. The need exists for ongoing formative evaluation of the B. Ed. programs to assess the admission policy and process. This study should include (a) a review of admission decisions, and (b) an outcome study to monitor the professional and academic performance of the graduates;

3. An attrition study should also be conducted to clarify the drop out rate and the reasons for drop out from the B. Ed. Business Education programs at UTECH; and

4. It is hoped that the present evaluation study will serve as a base from which to generate a culture of evaluation inquiry in post-secondary education at UTECH and other institutions of higher learning in Jamaica.

References

Alkin, M. C. (1969). Evaluation theory development. Evaluation Comment, 2, 2-7.

Anderson, S. B., & Ball, S. (1978). The profession and practice of program evaluation. San Francisco, CA: Jossey-Bass Publishers.

B. Ed. Self-Study. (1986). Kingston: CAST.

B. Ed. Handbook. (1986). Kingston: CAST.

Babbie, E. (1986). The practice of social research. Belmont, California: Wadsworth Publishing Co.

Bernstein, I. N., & Freeman, H. E. (1975). Academic and entrepreneurial research. New York: Russell Sage.

Bickman, L. (1987). The functions of program theory. New Directions for Program Evaluation, 33, (pp. 5-18). San Francisco, CA: Jossey-Bass Inc.

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. L. (1956). Taxonomy of educational objectives: Handbook 1. Cognitive domain. New York: David McKay.

Bower, C., & Myers, E. (1976). A manual for conducting student attrition studies in institutions of post-secondary education. Technical Report 74. Boulder, Colo.: NCHEMS at WICHE.

Campbell, M., & Martin, R. (1992). Qualitative research as a tool for agricultural and extension education. Journal of Agricultural Education, 33, (4), 55-60.

Campbell, D. T. (1969). Reforms as experiments. American Psychologist, 24, 409 - 429.

Campbell, D. T., & Stanley, J. C. (1966). Experimental and quasi-experimental designs for research. Chicago: Rand McNally.

Case, R., Werner, W., Onno, E., & Daniels, L. (1985). Evaluation for development education. Vancouver: CSCI, University of British Columbia.

CAST. (1994). Strategic plan for the Polytechnic of Jamaica 1995-1998. Kingston: Author.

CAST. (1992). The third development plan: Towards the year 2000. Kingston: Author.

Caro, F. G. (1971). (Ed.). Readings in Evaluation Research. New York: Russell Sage.

Chen, H. T. (1997). Applying mixed methods under the framework of theory-driven evaluations. In J. C. Green, & V. J. Caracelli. (Eds.), New Directions for Evaluation, 74, 61-72.

Cronbach, L. J. (1963). Course improvement through evaluation. Teacher College Record, 64, 672 - 683.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.

Dean, D. L. (1994). How to use focus group. In J. S. Wholey, H. P. Hatry, & K. E. Newcomer (Eds.), Handbook of practical program evaluation (pp. 338-373). San Francisco, CA: Jossey-Bass Publishers.

Dodson, S. C. (1994). Interim summative evaluation: Assessing the value of a long term or ongoing program during its operation (Program value). Ph. D. Thesis, Western Michigan University.

Duffy, M. E. (1987). Methodological triangulation: A vehicle for merging quantitative and qualitative research methods. IMAGE: Journal of Nursing Scholarship, 19, 130-133.

Dworaczyk, W. J. (1998). Use of Stufflebeam's CIPP model to assess a change effort in a division of a university library (Daniel L. Stufflebeam). Ph. D. Thesis, University of North Texas.

Eisner, E. W. (1979). The use of qualitative forms of evaluation for improving educational practice. Educational Evaluation and Policy Analysis, 1, 11-19.

Falsey, T. A. (1989). Corporate philosophies and mission statements: A survey and guide for corporate communications and management. New York: Quorum Books.

Finch, C. R., & Crunkitilton, J. R. (1993). Curriculum development in vocational and technical education: Planning, content, and implementation (4th ed.). Boston: Allyn and Bacon.

Fortney, J. J. (1988). A follow-up study of students in rural secondary gifted programs (Gifted programs). Ed. D. Thesis, Indiana University.

Fritz, S. K. (1996). Assessing undergraduate student needs utilizing the CIPP model of evaluation. Ph. D. Thesis, University of Isaho.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). Educational research: An introduction (6th ed.). New York: Longman Publishers.

Gilberg, J. A., & Scholwinski, E. (1983). Improving the utility of school psychological reports through evaluation using Stufflebeam's CIPP model. School Psychology Review, 12, (3), 346-350.

Glass, G. V. (1969). Design of evaluation studies. Paper presented at the Council for Exceptional Children Special Conference on Early Childhood Education. New Orleans: LA.

Gold-Schmid, B., & Gold-Schmid, M. (1972). Modular instruction in higher education: A review. Montreal: McGill University.

Gould, W. T. S. (1993). People and education in the third world. New York: Longman Development Studies.

Graham, J. W., & Halick, W. C. (1994). Mission statements: A guide to the corporate and nonprofit sectors. New York: Garland Publishing, Inc.

Green, J. C., & Caracelli, V. J. (Eds.). (1997). Crafting mixed methods evaluation designs. New Directions for Evaluation, 74, (pp. 19-32). San Francisco: Jossey-Bass Inc., Publishers.

Guba, E. G., & Lincoln, Y. S. (1981). Effective evaluation. San Francisco, CA: Jossey-Bass.

Guba, E. G., & Lincoln, Y. S. (1985). Naturalistic Inquiry. Beverley Hills, CA: Sage Publishers.

Guba, E. G., & Lincoln, Y. S. (1989). Fourth generation evaluation. Thousand Oaks, CA: Sage Publishers.

Hall, E. G., & Jones, H. L. (1976). Competency-based education: A process for the improvement of education. Englewood Cliffs, NJ: Prentice Hall, Inc.

Harrison, A. S. (1993). An evaluation model for middle school counseling and guidance. Ph. D Thesis, Old Dominion University.

Hayes, S. P., Jr. (1959). Evaluating development projects. Paris: UNESCO.

Hopkins, D. (1989). Evaluation for school development. Milton Keynes: Open University Press.

House, E. R. (1983a). Assumptions underlying evaluation models. In G. Madus, M. Scriven, & D. L. Stufflebeam. (Eds.), Evaluation models: Viewpoints on educational and services evaluation (pp. 45-64). Boston, MA: Kluwer-Nijhoff.

House, E. R. (1983b). How we think about evaluation. New Directions for Program Evaluation, 19, (pp.5-26). San. Francisco, CA: Jossey-Bass Publishers.

House, E. R. (1980). Evaluating with validity. Beverly Hills, CA: Sage Publications.

House (1976). Justice in evaluation. In G. V. Glass (Ed.), Evaluation studies review annual, 1, (pp. 75-100). Beverly Hills, CA: Sage.

House, E. R., Mathison, S., Pearsol, J. A., & Preskill, H. (Eds.), (1982). Evaluation Studies Review Annuals, 7, (pp. 15-25). Beverly Hills: Sage Publication.

Hummel, T. J., & Sligo, J. R. (1971). Comparison of univariate and multivariate analysis of variance procedures. Psychological Bulletin, 76, 49-57.

Jamaica Directory of Educational Institutions. (1998-1999). Kingston, Jamaica: Ministry of Education & Culture, Planning & Development Division, Statistics Section.

Jamaica School Profiles. (1996-1997). Kingston, Jamaica: Ministry of Education & Culture, Planning & Development Division, Statistics Section.

Kemp, M. (1981). Self assessment of a sign language program. American Annals of the Deaf, 133, (5), 349-355.

Kidder, L. H. (1981). Research methods in social relations. Toronto: Holt, Rinehart & Winston.

Knox, A. B. (1972). Continuous program evaluation. In P. A. Taylor, & D. M. Cowley (Eds.), Readings in Curriculum Evaluation (pp. 198-210). Dubuque, Iowa: W. M. C. Brown Company Publishers.

Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1964). Taxonomy of educational objectives: Handbook II. Affective domain. New York: David McKay.

Lindquist, E. F. (Ed.). (1951). Educational measurement. Washington, D. C.: American Council on Education.

Madus, G., Scriven, M., & Stufflebeam, D. L. (Ed.).(1983). Program evaluation: A historical overview. Evaluation models: Viewpoints on educational and services evaluation (pp. 3-22). Boston, MA: Kluwer-Nijhoff.

Maher, C. A. (1982). Program evaluation of a special education day school for conduct problem adolescents. In E. R. House, S. Mathison, J. A. Pearsol, & K. Preskill (Eds.), Evaluation Studies Review Annuals, 7, (pp. 406-412). Beverly Hills: Sage Publication.

Martin, T. W. (1966). The Martin Performance Appraisal. California: Western Psychological Services.

Mattox, J. (1991). An evaluation of the program of theological education by extension at the centre for Christian studies in Northwest Mexico. Ed. D Thesis, University of San Diego.

Miller, W. H., & Murray, R. M. (1977). Jamaica Education sector survey. Ministry of Education, Jamaica, WI.

Moore, J. R. (1990). Terra incognita: Program design and evaluation in teacher education. Peabody Journal of Education, 65, (2), 92-106.

Moussa, L. M. (1996). Post-literacy in Niger: Program design and the transfer of learning. Ph. D. Thesis, The Florida State University.

Nicholason, T. (1989). Using the CIPP model to evaluate reading instruction. Journal of Reading, 32, (4), 313-318.

Nicholas, J. O. (1991). A practitioner's handbook for institutional effectiveness and student outcomes assessment implementation. New York: Agathon Press.

Norton, J. R. (1990). The marriage of evaluation and training - part 1: Something old, something new, something borrowed, something blue. Performance and Instruction, 29, (1), 37-40.

Oliva, P. F. (1997). Developing the curriculum (4th ed.). New York: Longman.

Patton, M. Q. (1980). Qualitative evaluation methods. Beverly Hills, CA: Sage Publishers.

Patton, M. Q. (1996). A world larger than formative and summative. Evaluation Practice, 17, (2), 131-144.

Perreault, H. R. (Ed.). Classroom strategies: The methodology of Business Education, National Business Education yearbook, 36, Reston, Virgina: National Business Education Association.

Riecken, H. W., & Boruch, R. F. (Eds.). (1974). Social experimentation: A method for planning and evaluating social intervention. New York: Academic Publishers.

Popham, W. J. (Ed.). (1974). Evaluation in Education: Current applications. Berkeley, California: MrCutrham Publishing Corporation.

Popham, W. J. (1988). Educational Evaluation. Englewood Cliffs, New Jersey: Prentice Hall.

Rossi, P. H., & Freeman, H. E. (1982). Evaluation: A systematic approach. Beverly Hills, CA: Sage Publications.

Rossi, P. H., & Williams, W. (Eds.). (1972). Evaluating social programs. New York: Seminar.

Program Coordinator. (1998) Faculty of Education & Liberal Studies Degree Programs. B. Ed. summer component report. 1998-1999: Author.

Provus, M. M. (1971). Discrepancy evaluation. Berkley, CA: McCutchan Publishers.

Rutherford, W. L. (1989). Implementation of evaluation results. In J. B. Ayers, & M. F. Berney (Eds.), A practical guide to the teacher education evaluation (pp. 219-236). London: Kluwer Academic Publisher.

Sanders, J. R. (1992). Evaluating school programs: An educators guide. Newbury Park: Corwin Press, Inc.

Scheirer, M. A. (Ed.). (1987). New Directions for Program Evaluation, 33, San Francisco: Jossey-Bass Inc.

Scriven, M. (1967). The methodology of evaluation. In R. E. Stake (Ed.), Perspectives of Curriculum Evaluation, 1, (39-83). American Educational Research Association Monograph series on Evaluation. Chicago: Rand McNally.

Scriven, M. (1991). Evaluation Thesaurus (4th ed.). Newbury Park, CA: Sage Publishers.

Shadish, W. R. Jr., Cook, T. D., & Leviton, L. C. (1991). Foundations of Program Evaluation: Theories of practice. Newbury Park, CA: Sage Publications.

Slavenas, R., & Nowakowski, J. (1989). Improving programs for young children by applying a decision-based evaluation model. Illinois Schools Journal, 69, (1), 45-59.

Smith, N. L., & Hauer, D. M. (1990). The applicability of selected evaluation models to evolving investigative designs. Studies in Educational Evaluation, 16, (3), 489-500.

Smith, E. R., & Tyler, R. W. (1942). Appraising and recording student progress. New York: Harger & Row.

Stake, R. E. (1967). The countenance of educational evaluation. Teachers College record, 68, 523-540.

Stake, R. E. (1978). The case study method in social research, 7, 5-8.

Stitt-Gohdes, W. L. (1996). Business and industry need qualified worker. In H. R. Perreault (Ed.), Classroom strategies: The methodology of Business Education, National Business Education yearbook, 36, (pp. 1-9). Reston, Virgina: National Business Education Association.

Stark, J. S., & Thomas, A. (Eds.). (1994). Assessment and program evaluation. Needham Heights, MA: Simon & Schuster Publishers.

Stufflebeam, D. L. (1968). Evaluation as enlightenment for decision making. Columbus: Ohio State University Evaluation Center.

Stufflebeam, D. L. (1971). The relevance of the CIPP evaluation model for educational accountability. Journal of Research and Development in Education, 5, 19-25.

Stufflebeam, D. L. (1973). An introduction to the PDK book: Educational evaluation and decision-making. In B. R. Worthen, & J. R. Sanders (Eds.), Educational Evaluation: Theory and Practice (pp. 128-142). Belmont, CA: Wadsworth.

Stufflebeam, D. L. (1983). The CIPP model for program evaluation. In G. Madus, M. Scriven, & D. L. Stufflebeam (Eds.), Evaluation models: Viewpoints on educational and services evaluation (pp. 117-142). Boston, MA: Kluwer-Nijhoff.

Stufflebeam, D. L., & Webster, W. J. (1980). An analysis of alternative approaches to evaluation. Educational Evaluation and Policy Analysis, 2, (3), 5-20.

Stufflebeam, D. L., & Skinkfield, A. J. (1985). Systematic evaluation. Boston: Kluwer-Nijhoff.

Stufflebeam, D. L., & Webster, W. J. (1994). An analysis of alternative approaches to evaluation. In J. S. Stark, & A. Thomas (Eds.), Assessment and program evaluation (pp. 331-337). Needham Heights, MA: Simon & Schuster Publishers.

Suchman, E. (1967). Evaluative Research. New York: Russell Sage.

Taba, H. (1962). Curriculum development: Theory and practice. New York: Harcourt, Brace & World, Inc.

Tashakkori, A., & Teddlie, C. (1998). Mixed methodology: Combing qualitative and quantitative approaches. Thousand Oaks, CA: Sage Publications.

Taylor, D. W. (1998). E-6A aviation maintenance training curriculum evaluation: A case study. Ed. D Thesis, University of Washington.

Taylor, P. A., & Cowley, D. M. (1972). Readings in curriculum evaluation. Dubuque, Iowa: WMC Brown Company Publishers.

The Joint Committee on Standards for Educational Evaluation (1994). The program evaluation standards: How to assess evaluations of educational programs (2nd ed.). Thousand Oaks, CA: Sage Publications.

The University Council of Jamaica. (1997) Directory of Jamaican tertiary institutions (2^{nd} ed.). Jamaica: Author.

The University of Technology, Jamaica Act. (1999). Kingston: UTECH.

The Calvin McKain Library, University of Technology, Jamaica Fact sheet. (1999). Kingston: Author.

Theodossin, E. (1986). The modular market. Bristol: The Further Education Staff College.

Tyler, R. W. (1942). General statement on evaluation. Journal of Educational Research, 35, 492-501.

University of Technology, Jamaica. Prospectus. (1997-1999). Kingston: Author.

University of Technology, Jamaica. B. Ed. Handbook. (1998-1999). Kingston: Author.

University of Technology, Jamaica. Student Handbook. (1998-1999). Kingston: Author.

UTECH (1997). "Curriculum 2000" A new curriculum for A new millennium. Draft guidelines for the development of four-year undergraduate degree programs for implementation in the academic year 1999-2000. Kingston: Author.

Weiss C. H. (1972). Evaluating action programs: Readings in social action and education. Boston: Allyn and Bacon.

Wiley, D. E., & Block, R. D. (1967). Quasi-experimentation in educational setting: Comment. The School Review (pp. 353-366). Chicago:University of Chicago Press.

Wholey, J. S., Scanlon, J. W., Duffy, H., Fukumoto, J. S., & Vogt, L. M (1970). Federal evaluation policy. Washington, DC: The Urban Institute.

Wholey, J. S. (1994). Assessing the feasibility and likely usefulness of evaluation. In J. S. Wholey, H. P. Hatry, & K. E. Newcomer (Eds.), Handbook of practical program evaluation (pp. 15-39). San Francisco, CA: Jossey-Bass Publishers

Wholey, J. S., Hatry, H. P., & Newcomer, K. E. (Eds.). (1994). Handbook of practical program evaluation. San Francisco: Jossey-Bass Publishers.

World Bank (1993). Caribbean region: Access, quality and efficiency in education. Washington, DC: Author.

Worthen, B. R., & Sanders, J. R. (1973). Educational evaluation: Theory and practice. Worthington, Charles A: Jones Publishing Company.

Worthen, B. R., Sanders, J. R., & Fitzpatrick, J. L. (1997). Program evaluation: Alternative approaches and practical guidelines (2nd ed.). New York, Longman.

Appendix A

Students' and Graduates' Questionnaires

Module One Student Questionnaire

Section A: Part One

INSTRUCTIONS: Please read the following statements carefully, and then circle the number that expresses the degree to what you agree with each of the statements. Your thoughtful answers to these items will provide useful information improving the B. Ed. Business Education Programs in UTECH.

KEY:

Strongly Disagree	(SD)	= 1
Disagree	(D)	= 2
Agree	(A)	= 3
Strongly Agree	(SA)	= 4

Quality of Program

		SD	D	A	SA
1.	The B. Ed. Business Education programs will meet my employers' needs.	1	2	3	4
2.	The teaching staff of B. Ed. Business Education programs are academically adequate.	1	2	3	4
3.	The length of the summer session is adequate for producing skillful teachers.	1	2	3	4
4.	My expectations for what I can learn from the B. Ed. Business Education programs are high.	1	2	3	4
5.	The workload in module one B. Ed. Business Education programs is manageable.	1	2	3	4
6.	There is not a sufficient variety of courses in Module One.	1	2	3	4
7.	The modular degree program allows me to proceed at my own pace.	1	2	3	4

		SD	D	A	SA
8.	I am learning as much as I had expected to learn from the B. Ed. Business Education programs.	1	2	3	4
9.	I like the way the B. Ed. Business Education programs are organized.	1	2	3	4
10.	Overall, students in the B. Ed. Business Education programs have outstanding academic performance.	1	2	3	4
11.	I am not satisfied with the entry standards into the B. Ed. Business Education programs.	1	2	3	4
12.	The B. Ed. Business Education programs is useful to me.	1	2	3	4
13.	The B. Ed. program will makes me aware of current issues in Business Education.	1	2	3	4
14.	The pace of instruction in the B. Ed. Business Education programs is adequate.	1	2	3	4
Student Satisfaction					
15.	I have a negative attitude towards the B. Ed. Business Education programs.	1	2	3	4
16.	I find the B. Ed. Business Education programs interesting.	1	2	3	4
17.	I enjoy working with other students in the B. Ed. Business Education programs.	1	2	3	4
18.	I will rate my academic performance in the B. Ed. Business Education programs very highly.	1	2	3	4
19.	I would like to get a first class honors degree upon completion.	1	2	3	4
20.	The completion rate in the B. Ed. Business Education programs will be very high.	1	2	3	4

		SD	D	A	SA
21.	I effectively use my time for studies in the the B. Ed. Business Education programs.	1	2	3	4
22.	There is high rate of competition among students in the B. Ed. Business Education programs.	1	2	3	4
23.	Students in the B. Ed. Business Education programs are well behaved.	1	2	3	4
24.	I attend classes regularly.	1	2	3	4
25.	I found the B. Ed. program orientation useful.	1	2	3	4
26.	I enrolled in the B. Ed. Business Education programs to improve myself.	1	2	3	4

Quality and Adequacy of Course Content

		SD	D	A	SA
27.	A set of written objectives for each course in Module One was provided to me.	1	2	3	4
28.	The objectives for each course in Module One are appropriate and clearly stated.	1	2	3	4
29.	The objectives of the B. Ed. Business Education programs agree with my needs and expectations.	1	2	3	4
30.	The courses offered in Module One B. Ed. Business Education programs are in line with the goals and objectives of the Faculty of Education and Liberal Studies.	1	2	3	4
31.	The B. Ed. Business Education courses are well organized.	1	2	3	4
32.	Courses in Module One B. Ed. Business Education programs challenge me to higher academic performance.	1	2	3	4

		SD	D	A	SA
33.	The B. Ed. Business Education courses will increase my knowledge of Business Education.	1	2	3	4
34.	The contents of the courses are up-to-date with modern technologies.	1	2	3	4
35.	The seminar series in Module One will provide me with diverse insights into the course materials.	1	2	3	4
36.	The work experience component of the B. Ed. program will be very useful.	1	2	3	4
Quality of Instructors and Instruction					
37.	The instructors in the B. Ed. Business Education programs have adequate knowledge of the subject matter they teach.	1	2	3	4
38.	The personal appearances of the instructors in the B. Ed. program are commendable.	1	2	3	4
39.	The B. Ed. instructors ably explain their lessons.	1	2	3	4
40.	The B. Ed. instructors discuss teaching approaches with students.	1	2	3	4
41.	The B. Ed. instructors use a variety of teaching methods.	1	2	3	4
42.	The methods of instruction used in the B. Ed. Business Education programs are appropriate.	1	2	3	4
43.	The amount of instructions given in each course is sufficient.	1	2	3	4
44.	The difficulty level of the instructions are adequate.	1	2	3	4
45.	The instructions are in line with the objectives of the courses.	1	2	3	4

		SD	D	A	SA
46.	The instructors in the B. Ed. Business Education programs are receptive to students' questions.	1	2	3	4
47.	The B. Ed. instructors give me extra help in my studies.	1	2	3	4
48.	The instructors in the B. Ed. Business Education programs motivate me to study hard.	1	2	3	4
49.	I have a good working relationship with my instructors.	1	2	3	4
50.	The number of consulting hours with my instructors is adequate.	1	2	3	4
51.	The B. Ed. instructors are available during consulting hours.	1	2	3	4
52.	The B. Ed. instructors encourage me to express myself freely and openly.	1	2	3	4
53.	The B. Ed. instructors stimulate me to higher intellectual heights beyond my expectations.	1	2	3	4
54.	The B. Ed. instructors cover new ideas in their lessons.	1	2	3	4

Quality and Adequacy of Resources

Books/Journals

55.	The library books/journals are readily available for my use.	1	2	3	4
56.	The library books/ journals are adequate for my purposes.	1	2	3	4

Materials

57.	The quality of the teaching materials used for instruction is of a high standard.	1	2	3	4
58.	There are sufficient materials for instruction.	1	2	3	4
59.	The teaching materials are up-to-date.	1	2	3	4

		SD	D	A	SA
Personnel					
60.	The computer lab assistants are helpful.	1	2	3	4
61.	The computer lab assistants are pleasant.	1	2	3	4
62.	The B. Ed. degree office staff are helpful.	1	2	3	4
63.	The B. Ed. degree office staff are pleasant.	1	2	3	4
64.	The B. Ed. administrative staff care about my welfare.	1	2	3	4
65.	The library personnel are helpful.	1	2	3	4
66.	The library personnel are pleasant.	1	2	3	4
Facilities					
67.	The library reading area is not adequate.	1	2	3	4
68.	The library operating hours are adequate.	1	2	3	4
69.	The lending policies of the library are adequate.	1	2	3	4
70.	The library is a conducive place for me to study.	1	2	3	4
71.	The classrooms are not comfortable.	1	2	3	4
72.	Learning facilities in the classrooms are up-to-date.	1	2	3	4
73.	The learning environment is kept clean.	1	2	3	4
74.	The computers in the labs are up-to-date.	1	2	3	4
75.	The computers are available for me to use.	1	2	3	4
76.	The computer lab operating hours are not adequate.	1	2	3	4
77.	The B. Ed. degree office space is conducive for administrative work.	1	2	3	4
78.	There is enough reading space for my studies in the Faculty of Education and Liberal Studies.	1	2	3	4
79.	There are sources other than the Faculty of Education and Liberal Studies where additional reading resources can be found.	1	2	3	4

		SD	D	A	SA
80.	Student services on campus are not adequate.	1	2	3	4
81.	I live on campus.	1	2	3	4
82.	I find students accommodation on campus adequate.	1	2	3	4
83.	It is difficult to get accommodation on campus.	1	2	3	4
84.	Accommodation on campus is expensive.	1	2	3	4

Quality of Evaluation

		SD	D	A	SA
85.	My work is fairly graded.	1	2	3	4
86.	I have too many assignments to do.	1	2	3	4
87.	I am given sufficient time to do my assignments.	1	2	3	4
88.	I usually do my assignments on time.	1	2	3	4
89.	I try hard to get good grades on my assignments.	1	2	3	4
90.	The grading standards were clearly communicated to me.	1	2	3	4
91.	I am satisfied with the B. Ed. grading system.	1	2	3	4
92.	The B. Ed. instructors discuss the assessment procedures with the students.	1	2	3	4
93.	The B. Ed. instructors use a wide range of assessment methods.	1	2	3	4
94.	My progress is assessed continuously.	1	2	3	4
95.	I am given immediate feedback following an assessment.	1	2	3	4
96.	The assessments help me learn the materials covered.	1	2	3	4
97.	The assignments reflect the material covered during instruction.	1	2	3	4
98.	I am satisfied with the assessment procedures in the B. Ed. Business Education programs.	1	2	3	4

99. INSTRUCTIONS: Please select, and rate each of the following Module One subjects that belong to the program of study that you belong to. The rating should be in terms of their importance to you in meeting the expectations of your job as a Business Education teacher.

KEY:

Not Very Important = 1
Not Important = 2
Important = 3
Very Important = 4

BUSINESS STUDIES SUBJECTS: (Answer only if you are enrolled in the Business Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4

OPTION:

a.	Seminars	1	2	3	4

SPECIALIST COURSES

a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4

SECRETARIAL STUDIES SUBJECTS: (Answer only if you are enrolled in the Business Studies program).

CORE COURSES

Module 1

a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4

OPTION:

a.	Seminars	1	2	3	4

SPECIALIST COURSES

a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4

100. Rate the relevance of these courses to your teaching job now/in future:

KEY:

Not Very Relevant = 1
Not Relevant = 2
Relevant = 3
Very Relevant = 4

BUSINESS STUDIES SUBJECTS: (Answer only if you are enrolled in the Business Studies program).

CORE COURSES

Module One		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
SPECIALIST COURSES					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4

SECRETARIAL STUDIES SUBJECTS: (Answer only if you are enrolled in the Secretarial Studies program).

CORE COURSES					
Module One		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
SPECIALIST COURSES					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4

101. Which course, if any, over-laps? (Please list)

102. What suggestions do you have on improving the course(s)? (Please list)

Section A: Part Two

INSTRUCTIONS: Please, provide answers below each of the following items. Your comments are invited on how to improve the B. Ed. Business Education programs in UTECH. If space is needed, extra sheet can be used.

102. If you were to withdraw from the B. Ed. Business Education programs, which three most important factors would you identify as reasons for withdrawing? (Please circle any three):

a. Course work
b. Academic preparedness
c. Teaching/learning situation and institutional atmosphere
d. Motivation to study.
e. Accommodation/travel problems
f. Finance/job
g. Other personal factors

104. What are the major strengths and weaknesses of the B. Ed. Business Education programs?

Strengths:

____

____

Weaknesses:

____

____

105. What aspects of this program are most beneficial to you?

____

____

106. What areas of the B. Ed. Business Education programs would you like to see improved? (Please list)

____

____

107. How well will the objectives of the B. Ed. Business Education programs meet your employers' expectations and needs?

Not very well __________

Well ____________

Very well ____________

108. To what extent will the modular system reflect the objectives of the Business Education programs?

Not very reflective _________

Reflective __________

Very reflective _________

109. Does the modular system take into account the characteristics of the students in the program?

YES ________ NO ______________

110. If yes, how? (Please state)

____

Section B

111. What is your gender?

Male _______ Female ________

112. What is your age range?

Below 20 ___________ 21 - 26 __________ 27 - 32 ___________

33 - 38 _____________ 39 - 44 __________ Above 44 _________

113. Which of the following best describes your level of education? (Please, select the highest level obtained)

a. Diploma _______

b. Bachelors Degree _______

c. Other (Please specify) ____

114. How many years of teaching experience do you have?

None _________

1- 5 years ________

6 - 10 years ________

Above 10 years __________

115. What is your Nationality?

Jamaican ___________

Other (Please specify) __________________

---

*Would you be interested in taking part in the focus group interview to discuss your perceptions of the B. Ed. Business Education programs?

Yes _____ No _____

If yes, please fill out the following information so that you can be contacted:

Name: ____

Phone Number: Work ____

Home ____

Thank you for your cooperation in completing this questionnaire.

Module Two Student Questionnaire

Section A: Part One

INSTRUCTIONS: Please read the following statements carefully, and then circle the number that expresses the degree to what you agree with each of the statements. Your thoughtful answers to these items will provide useful information for improving the B. Ed. Business Education programs in UTECH.

KEY:

Strongly Disagree (SD) = 1
Disagree (D) = 2
Agree (A) = 3
Strongly Agree (SA) = 4

Program Quality

		SD	D	A	SA
1.	The B. Ed. Business Education programs is meeting my employers' needs.	1	2	3	4
2.	The teaching staff of B. Ed. Business Education programs are academically adequate.	1	2	3	4
3.	The length of each summer session is adequate for preparing me to teach.	1	2	3	4
4.	My expectations for what I can learn from the B. Ed. Business Education programs are high.	1	2	3	4
5.	The workload in Module Two B. Ed. Business Education programs is manageable.	1	2	3	4
6.	There is not a sufficient variety of courses in Module Two.	1	2	3	4
7.	The modular degree program allows me to proceed at my own pace.	1	2	3	4

		SD	D	A	SA
8.	I am learning as much as I had expected to learn from the B. Ed. Business Education programs.	1	2	3	4
9.	I like the way the B. Ed. Business Education programs are organized.	1	2	3	4
10.	Overall, students in the B. Ed. Business Education programs have outstanding academic performance.	1	2	3	4
11.	I am not satisfied with the entry standards into the B. Ed. Business Education programs.	1	2	3	4
12.	The B. Ed. Business Education programs is useful to me.	1	2	3	4
13.	The B. Ed. program makes me aware of current issues in Business Education.	1	2	3	4
14.	The pace of instruction in the B. Ed. Business Education program is adequate.	1	2	3	4

Student Satisfaction

		SD	D	A	SA
15.	I have a negative attitude towards the B. Ed. Business Education programs.	1	2	3	4
16.	I find the B. Ed. Business Education programs interesting.	1	2	3	4
17.	I enjoy working with other students in the B. Ed. Business Education programs.	1	2	3	4
18.	I rate my academic performance in the B. Ed. Business Education programs very highly.	1	2	3	4

		SD	D	A	SA
19.	I would like to get a first class honors degree upon completion.	1	2	3	4
20.	The completion rate in the B. Ed. Business Education programs is very high.	1	2	3	4
21.	I effectively use my time for studies in the B. Ed. Business Education programs.	1	2	3	4
22.	There is a high rate of competition among students in the B. Ed. Business Education programs.	1	2	3	4
23.	Students in the B. Ed. Business Education programs are well behaved.	1	2	3	4
24.	I attend classes regularly.	1	2	3	4
25.	I found the B. Ed. orientation useful.	1	2	3	4
26.	I enrolled into the B. Ed. Business Education programs to improve myself.	1	2	3	4

Quality and Adequacy of Course Content

27.	A set of written objectives for each course in Module Two was provided to me.	1	2	3	4
28.	The objectives for every course in Module Two are appropriate and clearly stated.	1	2	3	4
29.	The objectives of the B. Ed. Business Education programs agree with my needs and expectations.	1	2	3	4
30.	The courses offered in Module Two B. Ed. Business Education programs are in line with the goals and objectives of the Faculty of Education and Liberal Studies.	1	2	3	4

		SD	D	A	SA
31.	The B. Ed. Business Education courses are well organized.	1	2	3	4
32.	Courses in Module Two B. Ed. Business Education programs challenge me to higher academic performance.	1	2	3	4
33.	The B. Ed. Business Education courses has increased my knowledge of Business Education.	1	2	3	4
34.	The contents of the courses are up-to-date with modern technologies.	1	2	3	4
35.	The seminar series at the end of Module One provided me with diverse insights into the course materials.	1	2	3	4
36.	The work experience component of the B. Ed. program is useful to me.	1	2	3	4
Quality of Instructors and Instruction					
37.	The instructors in the B. Ed. Business Education programs have adequate knowledge of the subject matter they teach.	1	2	3	4
38.	The personal appearances of the instructors in the B. Ed. Business Education programs are commendable.	1	2	3	4
39.	The B. Ed. instructors ably explain their lessons.	1	2	3	4
40.	The B. Ed. instructors discuss teaching approaches with students.	1	2	3	4
41.	The B. Ed. instructors use a variety of teaching methods.	1	2	3	4
42.	The methods of instruction used in the B. Ed. Business Education programs are appropriate.	1	2	3	4

		SD	D	A	SA
43.	The amount of instructions given in each course is sufficient.	1	2	3	4
44.	The difficulty level of the instructions are adequate.	1	2	3	4
45.	The instructions are in line with the objectives of the courses.	1	2	3	4
46.	The instructors in the B. Ed. Business Education programs are receptive to students' questions.	1	2	3	4
47.	The B. Ed. instructors give me extra help in my studies.	1	2	3	4
48.	The instructors in the B. Ed. Business Education programs motivate me to study hard.	1	2	3	4
49.	I have a good working relationship with my instructors.	1	2	3	4
50.	The number of consulting hours with my instructors is adequate.	1	2	3	4
51.	The B. Ed. instructors are available during consultation hours.	1	2	3	4
52.	The B. Ed. instructors encourage me to express myself freely and openly.	1	2	3	4
53.	The B. Ed. instructors stimulate me to higher intellectual heights beyond my expectations.	1	2	3	4
54.	The B. Ed. instructors cover new ideas in their lessons.	1	2	3	4

Quality and Adequacy of Resources

Books/Journals		SD	D	A	SA
55.	The library books/journals are readily available for my use.	1	2	3	4
56.	The library books/ journals are adequate for my purposes.	1	2	3	4
Materials					
57.	The quality of the teaching materials used for instruction is of a high standard.	1	2	3	4
58.	There are sufficient materials for instruction.	1	2	3	4
59.	The teaching materials are up-to-date.	1	2	3	4
Personnel					
60.	The computer lab assistants are helpful.	1	2	3	4
61.	The computer lab assistants are pleasant.	1	2	3	4
62.	The B. Ed. degree office staff are helpful.	1	2	3	4
63.	The B. Ed. degree office staff are pleasant.	1	2	3	4
64.	The B. Ed. administrative staff care about my welfare.	1	2	3	4
65.	The library personnel are helpful.	1	2	3	4
66.	The library personnel are pleasant.	1	2	3	4
Facilities					
67.	The library reading area is not adequate.	1	2	3	4
68.	The library operating hours are adequate.	1	2	3	4
69.	The lending policies of the library are adequate.	1	2	3	4
70.	The library is a conducive place for me to study.	1	2	3	4
71.	The classrooms are not comfortable.	1	2	3	4
72.	Learning materials in the classrooms are up-to-date.	1	2	3	4

		SD	D	A	SA
73.	The learning environment is kept clean.	1	2	3	4
74.	The computers in the labs are up-to-date.	1	2	3	4
75.	The computers are available for me to use.	1	2	3	4
76.	The computer lab operating hours are not adequate.	1	2	3	4
77.	The B. Ed. degree office space is conducive for administrative work.	1	2	3	4
78.	There is enough reading space for my studies in the Faculty of Education and Liberal studies.	1	2	3	4
79.	There are sources other than the Faculty of Education and Liberal studies where additional reading resources can be found.	1	2	3	4
80.	Student services on campus are not adequate.	1	2	3	4
81.	I live on campus.	1	2	3	4
82.	I find student accommodation on campus adequate.	1	2	3	4
83.	It is difficult to get accommodation on campus.	1	2	3	4
84.	Accommodation on campus is expensive.	1	2	3	4

Quality of Evaluation

85.	My work is fairly graded.	1	2	3	4
86.	I have too many assignments to do.	1	2	3	4
87.	I am given sufficient time to do my assignments.	1	2	3	4
88.	I usually do my assignments on time.	1	2	3	4
89.	I try hard to get good grades on my assignments.	1	2	3	4
90.	The grading standards were clearly communicated to me.	1	2	3	4
91.	I am satisfied with the B. Ed. grading system.	1	2	3	4

		SD	D	A	SA
92.	The B. Ed. instructors discuss the assessment procedures with the students.	1	2	3	4
93.	The B. Ed. instructors use a wide range of assessment methods.	1	2	3	4
94.	My progress is assessed continuously.	1	2	3	4
95.	I am given immediate feedback following an assessment.	1	2	3	4
96.	The assessments help me learn the materials covered.	1	2	3	4
97.	Examinations/tests reflect the materials covered during instruction.	1	2	3	4
98.	I am satisfied with the assessment procedures in the B. Ed. Business Education programs.	1	2	3	4
99.	The examination schedule allows me to prepare adequately.	1	2	3	4
100.	The examination environment is comfortable.	1	2	3	4
101.	Examinations are well organized.	1	2	3	4
102.	The examination questions are worded clearly.	1	2	3	4
101.	The examination papers contain a good mixture of selected and constructed response items.	1	2	3	4
104.	My papers have adequate comments on them.	1	2	3	4
105.	The Faculty of Education and Liberal Studies always keeps me informed about my academic progress.	1	2	3	4

106. INSTRUCTIONS: Please select, and rate each of the following subjects that are included in Modules One and Two, and the program of study that you belong to. The rating should be in terms of their importance to you in meeting the expectations of your job as a Business Education teacher.

KEY:

Not Very Important = 1
Not Important = 2
Important = 3
Very Important = 4

BUSINESS STUDIES SUBJECTS: (Answer only if you are enrolled in the Business Studies program).

CORE COURSES					
Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
SPECIALIST COURSES					
Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4

Module 2		1	2	3	4
d.	Data processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
.f.	Financial Accounting 1	1	2	3	4

SECRETARIAL STUDIES SUBJECTS: (Answer only if you are enrolled in the Secretarial Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4

SPECIALIST COURSES

Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Word/Information Processing 1	1	2	3	4

107. Rate the relevance of these course(s) to your teaching job now/in the future:

KEY:

Not Very Relevant = 1
Not Relevant = 2
Relevant = 3
Very Relevant = 4

BUSINESS STUDIES SUBJECTS: (Answer only if you are enrolled in the Business Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
SPECIALIST COURSES					
Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Financial Accounting 1	1	2	3	4

SECRETARIAL STUDIES SUBJECTS: **(Answer only if you are enrolled in the Secretarial Studies program).**

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
SPECIALIST COURSES					
Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Word/Information Processing 1	1	2	3	4

108. Which course, if any, over-laps? (Please list)

____

____

109. What suggestions do you have on improving the course(s)? (Please list)

____

____

SECTION A: Part Two

INSTRUCTIONS: Please, provide answers below each of the following items. Your comments are invited on how to improve the B. Ed. Business Education program in UTECH. If space is needed, extra sheet can be used.

109. If you were to withdraw from the B. Ed. Business Education programs, which three most important factors would you identify as reasons for withdrawing? (Please circle any three):
    - a. Course work.
    - b. Academic preparedness.
    - c. Teaching/learning situation and institutional atmosphere.
    - d. Motivation to study.
    - e. Accommodation/travel problems.
    - f. Finance/job.
    - g. Other personal factors.

111. What are the major strengths and weaknesses of the B. Ed. Business Education programs?

Strengths:

____

____

Weaknesses:

____

____

112. What aspects of this program are most beneficial to you?

____

____

113. What are the areas of the B. Ed. Business Education programs would you like to see improved? (Please list)

____

____

114. How well do the objectives of the B. Ed. Business Education programs meet your employers' needs and expectations?

Not very well ________

Well ______________

Very well ___________

115. To what extent does the modular system reflect the objectives of the B. Ed. Business Education programs?

Not very reflective __________

Reflective ____________

Very reflective ____________

116. Does the modular system at UTECH take into account the characteristics of the students in the program?

YES __________ NO _____________

117. If yes, how? (Please state)

____

____

118a. Did you experience any problem in the modular system?

YES __________ NO _____________

b. If yes, what type of problem(s)? (Please specify)

____

____

119. How confident did you feel about using the modular system? (Please check)

a. Very confident

b. Confident

c. Not very confident

d. Not at all confident

120. What factors enhance the implementation of the B. Ed. programs? (Please state)

____

____

121. What factors affect the implementation of the B. Ed. programs? (Please list)

____

____

122. What future threats to the success of the B. Ed. programs do you see? (Please list)

____

____

Section B

123. What is your gender?

Male _______ Female ________

124. What is your age range?

Below 20 __________ 21 - 26 __________ 27 - 32 ___________

33 - 38 _____________ 39 - 44 __________ Above 44 _________

125. Which of the following best describes your level of education? (Please select the highest level obtained)

a. Diploma _______

b. Bachelors Degree _______

c. Other (Please specify) _____________________________________

126. How many years of teaching experience do you have?

None _________

1- 5 years ________

6 - 10 years ________

Above 10 years __________

127. What is your Nationality?

Jamaican ___________

Other (Please specify) __________________

*Would you be interested in taking part in the focus group interview to discuss your perceptions of the B. Ed. Business Education programs?

Yes _____ No _____

If yes, please fill out the following information so that you can be contacted:

Name (Just first name is okay): ____________________________________

Phone Number: Work ____________________________________

Home ____________________________________

Thank you for your cooperation in completing this questionnaire.

Module Three Student Questionnaire

Section A: Part One

INSTRUCTIONS: Please read the following statements carefully, and then circle the number that expresses the degree to which you agree with each of the statements. Your thoughtful answers to these items will provide useful information for improving the B. Ed. Business Education programs in UTECH.

KEY:

Strongly Disagree	(SD)	= 1
Disagree	(D)	= 2
Agree	(A)	= 3
Strongly Agree	(SA)	= 4

Program Quality

		SD	D	A	SA
1.	The B. Ed. Business Education programs is meeting my employers' needs.	1	2	3	4
2.	The teaching staff of the B. Ed. Business Education programs are academically adequate.	1	2	3	4
3.	The length of the summer sessions is adequate for producing skillful teachers.	1	2	3	4
4.	My expectations for what I can learn from the B. Ed. Business Education programs are high.	1	2	3	4
5.	The workload in Module Three B. Ed. Business Education program is manageable.	1	2	3	4
6.	There is not a sufficient variety of courses in Module Three.	1	2	3	4
7.	The modular degree program allows me to proceed at my own pace.	1	2	3	4

		SD	D	A	SA
8.	I am learning as much as I had expected to learn from the B. Ed. Business Education programs.	1	2	3	4
9.	I like the way the B. Ed. Business Education programs is organized.	1	2	3	4
10.	Overall, students in the B. Ed. Business Education programs have outstanding academic performance.	1	2	3	4
11.	I am not satisfied with the entry standards into the B. Ed. Business Education programs.	1	2	3	4
12.	The B. Ed. Business Education programs is useful to me.	1	2	3	4
13.	The B. Ed. program makes me aware of current issues in Business Education.	1	2	3	4
14.	The pace of instruction in the B. Ed. Business Education programs is adequate.	1	2	3	4

Student Satisfaction

15.	I have a negative attitude towards the B. Ed. Business Education programs.	1	2	3	4
16.	I find the B. Ed. Business Education programs interesting.	1	2	3	4
17.	I enjoy working with other students in the B. Ed. Business Education programs.	1	2	3	4
18.	I rate my academic performance in the B. Ed. Business Education programs very highly.	1	2	3	4
19.	I would like to get a first class honors degree upon completion.	1	2	3	4

		SD	D	A	SA
20.	The completion rate in the B. Ed. Business Education programs are very high.	1	2	3	4
21.	I effectively use my time for studies in the B. Ed. Business Education programs.	1	2	3	4
22.	There is a high rate of competition among students in the B. Ed. Business Education programs.	1	2	3	4
23.	Students in the B. Ed. Business Education programs are well behaved.	1	2	3	4
24.	I attend classes regularly.	1	2	3	4
25.	I found the B. Ed. program orientation useful.	1	2	3	4
26.	I enrolled into the B. Ed. Business Education programs to improve myself.	1	2	3	4

Quality and Adequacy of Course Content

27.	A set of written objectives for each course in Module Three was provided to me.	1	2	3	4
28.	The objectives for every course in Module Three are appropriate and clearly stated.	1	2	3	4
29.	The objectives of the B. Ed. Business Education programs agree with my needs and expectations.	1	2	3	4
30.	The courses offered in Module Three B. Ed. Business Education programs are in line with the goals and objectives of the Faculty of Education and Liberal Studies.	1	2	3	4
31.	The B. Ed. Business Education courses are well organized.	1	2	3	4

		SD	D	A	SA
32.	Courses in Module Three B. Ed. Business Education programs challenge me to higher academic performance.	1	2	3	4
33.	The B. Ed. Business Education courses has increased my knowledge of Business Education.	1	2	3	4
34.	The contents of the courses are up-to-date with modern technologies.	1	2	3	4
35.	The seminar series at the end of Module Two provided me with diverse insights into the course materials.	1	2	3	4
36.	The work experience component of the B. Ed. program is very useful.	1	2	3	4

Quality of Instructors and Instruction

		SD	D	A	SA
37.	The instructors in the B. Ed. Business Education programs have adequate knowledge of the subject matter they teach.	1	2	3	4
38.	The personal appearances of instructors in the B. Ed. Program are commendable.	1	2	3	4
39.	The B. Ed. instructors ably explain their lessons.	1	2	3	4
40.	The B. Ed. instructors discuss teaching approaches with students.	1	2	3	4
41.	The B. Ed. instructors use a variety of teaching methods.	1	2	3	4
42.	The methods of instruction used in the B. Ed. Business Education programs are appropriate.	1	2	3	4
43.	The amount of instructions given in each course is sufficient.	1	2	3	4

		SD	D	A	SA
44.	The difficulty level of the instructions are adequate.	1	2	3	4
45.	The instructions are in line with the objectives of the courses.	1	2	3	4
46.	The instructors in the B. Ed. Business Education programs are receptive to students' questions.	1	2	3	4
47.	The B. Ed. instructors give me extra help in my studies.	1	2	3	4
48.	The instructors in the B. Ed. Business Education programs motivate me to study hard.	1	2	3	4
49.	I have a good working relationship with my instructors.	1	2	3	4
50.	The number of consulting hours with my instructors is adequate.	1	2	3	4
51.	The B. Ed. instructors are available during consultation hours.	1	2	3	4
52.	The B. Ed. instructors encourage me to express myself freely and openly.	1	2	3	4
53.	The B. Ed. instructors stimulate me to higher intellectual heights beyond my expectations.	1	2	3	4
54.	The B. Ed. instructors cover new ideas in their lessons.	1	2	3	4

Quality and Adequacy of Resources

	Books/Journals	SD	D	A	SA
55.	The library books/journals are readily available for my use.	1	2	3	4
56.	The number of library books/ journals are adequate for my purposes.	1	2	3	4
	Materials				
57.	The quality of the teaching materials used for instruction is of a high standard.	1	2	3	4
58.	There are sufficient materials for instruction.	1	2	3	4
59.	The teaching materials are up-to-date.	1	2	3	4
	Personnel				
60.	The computer lab assistants are helpful.	1	2	3	4
61.	The computer lab assistants are pleasant.	1	2	3	4
62.	The B. Ed. degree office staff are helpful.	1	2	3	4
63.	The B. Ed. degree office staff are pleasant.	1	2	3	4
64.	The B. Ed. administrative staff care about my welfare.	1	2	3	4
65.	The library personnel are helpful.	1	2	3	4
66.	The library personnel are pleasant.	1	2	3	4
	Facilities				
67.	The library reading area is not adequate.	1	2	3	4
68.	The library operating hours is adequate.	1	2	3	4
69.	The lending policies of the library are adequate.	1	2	3	4
70.	The library is a conducive place for me to study.	1	2	3	4
71.	The classrooms are not comfortable.	1	2	3	4
72.	Learning materials in the classrooms are up-to-date.	1	2	3	4

		SD	D	A	SA
73.	The learning environment is kept clean.	1	2	3	4
74.	The computers in the labs are up-to-date.	1	2	3	4
75.	The computers are available for me to use.	1	2	3	4
76.	The computer lab operating hours are not adequate.	1	2	3	4
77.	The B. Ed. degree office space is conducive for administrative work.	1	2	3	4
78.	There is enough reading space for my studies in the Faculty of Education and Liberal studies.	1	2	3	4
79.	There are sources other than the Faculty of Education and Liberal studies where additional reading resource can be found.	1	2	3	4
80.	Student services on campus are not adequate.	1	2	3	4
81.	I live on campus.	1	2	3	4
82.	I find student accommodation on campus adequate.	1	2	3	4
83.	It is difficult to get accommodation on campus.	1	2	3	4
84.	Accommodation on campus is expensive.	1	2	3	4

Quality of Evaluation

85.	My work is fairly graded.	1	2	3	4
86.	I have too many assignments to do.	1	2	3	4
87.	I am given sufficient time to do my assignments.	1	2	3	4
88.	I usually do my assignments on time.	1	2	3	4
89.	I try hard to get good grades on my assignments.	1	2	3	4
90.	The grading standards were clearly communicated to me.	1	2	3	4
91.	I am satisfied with the B. Ed. grading system.	1	2	3	4

		SD	D	A	SA
92.	The B. Ed. instructors discuss the assessment procedures with the students.	1	2	3	4
93.	The B. Ed. instructors use a wide range of assessment methods.	1	2	3	4
94.	My progress is assessed continuously.	1	2	3	4
95.	I am given immediate feedback following an assessment.	1	2	3	4
96.	The assessments help me learn the materials covered.	1	2	3	4
97.	Examinations/tests reflect the materials covered during instruction.	1	2	3	4
98.	I am satisfied with the assessment procedures in the B. Ed. Business Education programs.	1	2	3	4
99.	The examination schedule allows me to prepare adequately.	1	2	3	4
100.	The examination environment is comfortable.	1	2	3	4
101.	Examinations are well organized.	1	2	3	4
102.	The examination questions are worded clearly.	1	2	3	4
103.	The examination papers contain a good mixture of selected and constructed response items.	1	2	3	4
104.	My papers have adequate comments on them.	1	2	3	4
105.	The Faculty of Education and Liberal Studies always keeps me informed about my academic progress.	1	2	3	4

106. INSTRUCTIONS: Please select, and rate each of the following subjects that were included in Modules One, Two, and Three, and the program of study that you belong to. The rating should be in terms of their importance to you in meeting the expectations of your job as a Business Education teacher.

KEY:

Not Very Important = 1
Not Important = 2
Important = 3
Very Important = 4

BUSINESS STUDIES SUBJECTS: (Answer only if you are enrolled in the Business Studies program).

CORE COURSES

		1	2	3	4
Module 1					
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 3					
e.	Curriculum Development	1	2	3	4
f.	Educational Measurement	1	2	3	4

SPECIALIST COURSES

Module 1		1	2	3	4
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Financial Accounting 1	1	2	3	4
Module 3					
g.	Human Relations	1	2	3	4
h.	Financial Accounting 2	1	2	3	4
i.	Caribbean Economy, Growth & Development	1	2	3	4

SECRETARIAL STUDIES SUBJECTS: (Answer only if you are enrolled in the Secretarial Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 3					
e.	Curriculum Development	1	2	3	4
f.	Educational Measurement	1	2	3	4

SPECIALIST COURSES

Module 1		1	2	3	4
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Word/Information Processing 1	1	2	3	4
Module 3					
g.	Human Relations	1	2	3	4
h.	Word/Information Processing 2	1	2	3	4

107. Rate the relevance of these courses to your teaching job now/in future:

KEY

Not Very Relevant = 1
Not Relevant = 2
Relevant = 3
Very Relevant = 4

BUSINESS STUDIES SUBJECTS: (Answer only if you are enrolled in the Business Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4

Module 2		1	2	3	4
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 3					
e.	Curriculum Development	1	2	3	4
f.	Educational Measurement	1	2	3	4
SPECIALIST COURSES					
Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Financial Accounting 1	1	2	3	4
Module 3					
g.	Human Relations	1	2	3	4
h.	Financial Accounting 2	1	2	3	4
i.	Caribbean Economy, Growth & Development	1	2	3	4

SECRETARIAL STUDIES SUBJECTS: (Answer only if you are enrolled in the Secretarial Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4

Module 2		1	2	3	4
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 3					
e.	Curriculum Development	1	2	3	4
f.	Educational Measurement	1	2	3	4
SPECIALIST COURSES					
Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Word/Information Processing 1	1	2	3	4
Module 3					
g.	Human Relations	1	2	3	4
h.	Word/Information Processing 2	1	2	3	4

108. Which course, if any, over-laps? (Please list)

____

____

109. What suggestions do you have on improving the course(s)? (Please list)

____

____

____

Section A: Part Two

INSTRUCTIONS: Please, provide answers below each of the following items. Your comments are invited on how to improve the B. Ed. Business Education programs in UTECH. If space is needed, extra sheet can be used.

110. If you were to withdraw from the B. Ed. Business Education programs, which three most important factors would you identify as reasons for withdrawing? (Please circle any three):
   a. Course work.
   b. Academic preparedness
   c. Teaching/learning situation and institutional atmosphere
   d. Motivation to study
   e. Accommodation/travel problems
   f. Finance/job
   g. Other personal factors

111. What are the major strengths and weaknesses of the B. Ed. Business Education programs?

Strengths:

____

____

Weaknesses:

____

____

112. What aspects of this program are most beneficial to you?

____

____

113. What areas of the B. Ed. Business Education programs would you like to see improved? (Please list)

____

____

114. How well do the objectives of the B. Ed. Business Education programs meet your employers' needs and expectations?

Not very well __________

Well ___________

Very well ___________

115. To what extent does the modular system reflect the objectives of the Business Education programs?

Not very reflective ___________

Reflective ______________

Very reflective ___________

116. Does the modular system take into account the characteristics of the students in the program?

YES ________ NO __________

117. If yes, how? (Please state)

____

____

____

118a. Did you experience any problem in the modular system?

YES _________ NO __________

b. If yes, what type of problem(s)? (Please specify)

____

____

119. How confident did you feel about using the modular system? (Please check)

a. Very confident

b. Confident

c. Not very confident

d. Not at all confident

120. What factors enhance the implementation of the B. Ed. program? (Please list)

____

____

____

121. What factors affect the implementation of the B. Ed. program? (Please list)

____

____

122. What future threats to the success of the B. Ed. program do you see? (Please list)

____

____

Section B

123. What is your gender?

Male _______ Female ________

124. What is your age range?

Below 20 ___________ 21 - 26 __________ 27 - 32 ___________

33 - 38 _____________ 39 - 44 __________ Above 44 _________

125. Which of the following best describes your level of education (please select the highest level obtained).

a. Diploma _______

b. Bachelors Degree _______

c. Other (Please specify) _____________

126. How many years of teaching experience do you have?

None _________

1- 5 years ________

6 - 10 years ________

Above 10 years __________

127. What is your Nationality?

Jamaican ___________

Other (Please specify) ______________

---

*Would you be interested in taking part in the focus group interview to discuss your perceptions of the B. Ed. Business Education programs?

Yes _____ No _____

If yes, please fill out the following information so that you can be contacted:

Name (Just first name is okay): ___________________________________

Phone Number: Work ____

Home ____

Thank you for your cooperation in completing this questionnaire.

Graduate Teacher Questionnaire

Section A: Part One

INSTRUCTIONS: Please read the following statements carefully, and then circle the number that expresses the degree to what you agree with each of the statements. Your thoughtful answers to these items will provide useful information for improving the B. Ed Business Education programs in UTECH.

KEY:

Strongly Disagree	(SD)	= 1
Disagree	(D)	= 2
Agree	(A)	= 3
Strongly Agree	(SA)	= 4

Program Quality

		SD	D	A	SA
1.	The B. Ed. Business Education programs met my employers' needs.	1	2	3	4
2.	The teaching staff of the B. Ed. Business Education programs were academically adequate.	1	2	3	4
3.	The length of each summer session was adequate for preparing skillful teachers.	1	2	3	4
4.	My expectations for what I learnt from the B. Ed. Business Education programs was high.	1	2	3	4
5.	The workload in the B. Ed. Business Education programs was manageable.	1	2	3	4
6.	There was not a sufficient variety of courses in B. Ed. Business Education programs.	1	2	3	4
7.	The modular degree program allowed me to proceed at my own pace.	1	2	3	4

		SD	D	A	SA
8.	I learnt more in the program than I expected to learn from the B. Ed. Business Education programs.	1	2	3	4
9.	I liked the way the B. Ed. Business Education programs was organized.	1	2	3	4
10.	Overall, students in the B. Ed. Business Education programs had outstanding academic performance.	1	2	3	4
11.	I was not satisfied with the entry standards into the B. Ed. Business Education programs.	1	2	3	4
12.	The B. Ed. Business Education programs was useful to me.	1	2	3	4
13.	The B. Ed. program made me aware of current issues in Business Education.	1	2	3	4
14.	The pace of instruction in B. Ed. Business Education program was adequate.	1	2	3	4

Graduate Satisfaction

		SD	D	A	SA
15.	I had a negative attitude towards studying in the B. Ed. Business Education programs.	1	2	3	4
16.	I found the B. Ed. Business Education programs interesting.	1	2	3	4
17.	I enjoyed working with other students in the B. Ed. Business Education programs.	1	2	3	4
18.	I rated my academic performance in the B. Ed. Business Education programs very highly.	1	2	3	4
19.	I expected to get a first class honors degree upon completion.	1	2	3	4

		SD	D	A	SA
20.	The completion rate in the B. Ed. Business Education programs was very high.	1	2	3	4
21.	I effectively used my time for studies in the B. Ed. Business Education programs.	1	2	3	4
22.	There was high rate of competition among students in the B. Ed. Business Education programs.	1	2	3	4
23.	Students in the B. Ed. Business Education programs were well behaved.	1	2	3	4
24.	I attended classes regularly.	1	2	3	4
25.	I found the B. Ed. program orientation useful.	1	2	3	4
26.	I enrolled into the B. Ed. Business Education programs to improve myself.	1	2	3	4

Quality and Adequacy of Course Content

		SD	D	A	SA
27.	A set of written objectives for each course was provided to me.	1	2	3	4
28.	The objectives for every course in the B. Ed. program were appropriate and clearly stated.	1	2	3	4
29.	The objectives of the B. Ed. Business Education programs agreed with my needs and expectations.	1	2	3	4
30.	The courses offered in the B. Ed. Business Education programs were in line with the goals and objectives of the Faculty of Education and Liberal Studies.	1	2	3	4
31.	The B. Ed. Business Education courses were well organized.	1	2	3	4

		SD	D	A	SA
32.	Courses in the B. Ed. Business Education programs challenged me to higher academic performance.	1	2	3	4
33.	The B. Ed. Business Education courses increased my knowledge of Business Education.	1	2	3	4
34.	The course contents were up-to-date with modern technologies.	1	2	3	4
35.	The seminar series provided me with diverse insights into the course materials.	1	2	3	4
36.	The work experience component of the B. Ed. program was very useful.	1	2	3	4
Quality of Instructors and Instruction					
37.	The instructors in the B. Ed. Business Education programs had adequate knowledge of the subject matter they taught.	1	2	3	4
38.	The personal appearance of the instructors in the B. Ed. program were commendable.	1	2	3	4
39.	The B. Ed. instructors' ably explained their lessons.	1	2	3	4
40.	The B. Ed. instructors discussed teaching approaches with students.	1	2	3	4
41.	The B. Ed. instructors used a variety of teaching methods.	1	2	3	4
42.	The methods of instruction used in the B. Ed. Business Education programs were appropriate.	1	2	3	4
43.	The amount of instructions given in each course was sufficient.	1	2	3	4

		SD	D	A	SA
44.	The difficulty level of the instructions were adequate.	1	2	3	4
45.	The instructions were in line with the objectives of the courses.	1	2	3	4
46.	The instructors in the B. Ed. Business Education programs were receptive to students' questions.	1	2	3	4
47.	The B. Ed. instructors gave me extra help in my studies.	1	2	3	4
48.	The instructors in the B. Ed. Business Education programs motivated me to study hard.	1	2	3	4
49.	I had a good working relationship with my instructors.	1	2	3	4
50.	The number of consulting hours with my instructors was adequate.	1	2	3	4
51.	The B. Ed. instructors were available during consultation hours.	1	2	3	4
52.	The B. Ed. instructors encouraged me to express myself freely and openly.	1	2	3	4
53.	The B. Ed. instructors stimulated me to higher intellectual heights beyond my expectations.	1	2	3	4
54.	The B. Ed. instructors covered new ideas their lessons.	1	2	3	4

Quality and Adequacy of Resources

Books/Journals

55.	The library books/journals were readily available for my use.	1	2	3	4

		SD	D	A	SA
56.	The library books/journals were adequate for my purposes.	1	2	3	4
Materials					
57.	The quality of the teaching materials used for instruction was of a high standard.	1	2	3	4
58.	There were sufficient materials for instruction.	1	2	3	4
59.	The teaching materials were up-to-date.	1	2	3	4
Personnel					
60.	The computer lab assistants were helpful.	1	2	3	4
61.	The computer lab assistants were pleasant.	1	2	3	4
62.	The B. Ed. degree office staff were helpful.	1	2	3	4
63.	The B. Ed. degree office staff were pleasant.	1	2	3	4
64.	The B. Ed. administrative staff cared about my welfare.	1	2	3	4
65.	The library personnel were helpful.	1	2	3	4
66.	The library personnel were pleasant.	1	2	3	4
Facilities					
67.	The library reading area was not adequate.	1	2	3	4
68.	The library operating hours were adequate.	1	2	3	4
69.	The lending policies of the library were adequate.	1	2	3	4
70.	The library was a conducive place for me to study.	1	2	3	4
71.	The classrooms were not comfortable.	1	2	3	4
72.	Learning materials in the classrooms were up-to-date.	1	2	3	4
73.	The learning environment was kept clean.	1	2	3	4
74.	The computers in the lab were up-to-date.	1	2	3	4

		SD	D	A	SA
75.	The computers were available for me to use.	1	2	3	4
76.	The computer lab operating hours were not adequate.	1	2	3	4
77.	The B. Ed. degree office space was conducive for administrative work.	1	2	3	4
78.	There was enough reading space for my studies in the Faculty of Education and Liberal studies.	1	2	3	4
79.	There were sources other than the Faculty of Education and Liberal studies where additional reading resources were found.	1	2	3	4
80.	Student services on campus were not adequate.	1	2	3	4
81.	I lived on campus.	1	2	3	4
82.	I found student accommodation on campus adequate.	1	2	3	4
83.	It was difficult to get accommodation on campus.	1	2	3	4
84.	Accommodation on campus was expensive.	1	2	3	4

Quality of Evaluation

85.	My work was fairly graded.	1	2	3	4
86.	I had too many assignments to do.	1	2	3	4
87.	I was given sufficient time to do my assignments.	1	2	3	4
88.	I usually did my assignments on time.	1	2	3	4
89.	I tried hard to get good grades on my assignments.	1	2	3	4
90.	The grading standards were clearly communicated to me.	1	2	3	4
91.	I was satisfied with the B. Ed. grading system.	1	2	3	4
92.	The B. Ed. instructors discussed the assessment procedures the student.	1	2	3	4
93.	The B. Ed. instructors used a wide range of assessment methods.	1	2	3	4

		SD	D	A	SA
94.	My progress was assessed continuously.	1	2	3	4
95.	I was given immediate feedback following an assessment.	1	2	3	4
96.	The assessment helped me to learn the materials covered.	1	2	3	4
97.	Examinations/tests reflected the materials covered during instruction.	1	2	3	4
98.	I was satisfied with the assessment procedures in the B. Ed. Business Education programs.	1	2	3	4
99.	The examination schedule allowed me to prepare adequately.	1	2	3	4
100.	The examination environment was comfortable.	1	2	3	4
101.	Examinations were well organized.	1	2	3	4
102.	The examination questions were worded clearly.	1	2	3	4
103.	The examination papers contained a good mixture of selected and constructed response items.	1	2	3	4
104.	My papers had adequate comments on them.	1	2	3	4
105.	The Faculty of Education and Liberal Studies always kept me informed about my academic progress.	1	2	3	4

106. INSTRUCTIONS: Please select, and rate each of the following courses in the program of study you belonged to when you were a student at UTECH. The rating should be in terms of their importance in meeting the expectations of your job as a Business Education teacher.

KEY:

Not Very Important = 1
Not Important = 2
Important = 3
Very Important = 4

BUSINESS STUDIES SUBJECTS: (Answer all if you were enrolled in the Business Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 3					
e.	Curriculum Development	1	2	3	4
f.	Educational Measurement	1	2	3	4

SPECIALIST COURSES

Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4

Module 2		1	2	3	4
d.	Data Processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Financial Accounting 1	1	2	3	4
Module 3					
g.	Financial Accounting 2	1	2	3	4
h.	Caribbean Economy, Growth & Development	1	2	3	4
i.	Human Relations	1	2	3	4

SECRETARIAL STUDIES SUBJECTS: (Answer all if you were enrolled in the Secretarial Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a	Seminars	1	2	3	4
Module 3					
e.	Curriculum Development	1	2	3	4
f.	Educational Measurement	1	2	3	4

SPECIALIST COURSES

Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4

Module 2		1	2	3	4
d.	Data Processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Word/Information Processing 1	1	2	3	4
Module 3					
g.	Human Relations	1	2	3	4
i.	Word/Information Processing 2	1	2	3	4

107. Rate the relevance of these courses to your teaching job now:

KEY

Not Very Relevant = 1
Not Relevant = 2
Relevant = 3
Very Relevant = 4

BUSINESS STUDIES SUBJECTS: (Answer all if you were enrolled in the Business Studies program).

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4

Module 3		1	2	3	4
e.	Curriculum Development	1	2	3	4
f.	Educational Measurement	1	2	3	4

SPECIALIST COURSES

Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data Processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Financial Accounting 1	1	2	3	4
Module 3					
g.	Financial Accounting 2	1	2	3	4
h.	Caribbean Economy, Growth & Development	1	2	3	4
i.	Human Relations	1	2	3	4

SECRETARIAL STUDIES SUBJECTS: (Answer all if you were enrolled in the Secretarial Studies program)

CORE COURSES

Module 1		1	2	3	4
a.	Research Methods 1	1	2	3	4
b.	Communication Skills	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4
Module 2					
c.	Research Methods 2	1	2	3	4
d.	Educational Administration	1	2	3	4
OPTION:					
a.	Seminars	1	2	3	4

Module 3		1	2	3	4
e.	Curriculum Development	1	2	3	4
f.	Educational Measurement	1	2	3	4
SPECIALIST COURSES					
Module 1					
a.	Data Processing 1	1	2	3	4
b.	Business Law	1	2	3	4
c.	Small Business 1	1	2	3	4
Module 2					
d.	Data Processing 2	1	2	3	4
e.	Small Business 2	1	2	3	4
f.	Word/Information Processing 1	1	2	3	4
Module 3					
g.	Human Relations	1	2	3	4
i.	Word/Information Processing 2	1	2	3	4

108. Which course, if any, over-lapped? (Please list)

____

____

109. What suggestions do you have on improving the course(s)? (Please list)

____

____

Section A: Part Two

110. What is your view of the benefits of the modular system? Select three most important benefits from the following statements:

a. Students can study in their own time, and pace
b. Convenient for teachers
c. Involves part time study spread over three years
d. Allows for different learning
e. Studying at a lower cost
f. Other (Please, write in) ________

111. What are the major strengths and weaknesses of the B. Ed. Business Education programs?

Strengths:

____

____

Weaknesses:

____

____

112. What aspects of this program were most beneficial to you?

____

____

113. What are the areas of the B. Ed. Business Education programs you would like to see improved? (Please list)

____

____

114. How well did the objectives of the B. Ed. Business Education programs meet your employers' needs and expectations?

Not very well __________
Well _________
Very well _________

115. To what extent does the modular system reflect the objectives of the Business Education programs?

Not very reflective ______
Reflective _______
Very reflective ______

116. Does the modular system take into account the characteristics of the students in the program?

YES __________ NO ____________

117. If yes, how? (Please state)

____

118a. Did you experience any problem in the modular system?

YES ________ NO __________

b. If yes, what type of problem(s)? (please specify)

____

____

119. How confident did you feel about using the modular system? (Please check)

e. Very confident

f. Confident

g. Not very confident

h. Not at all confident

120. What factors enhance the implementation of the B. Ed. Business Education programs? (Please list)

____

____

121. What factors affect the implementation of the B. Ed. Business Education programs? (Please list)

____

____

122. What future threats to the success of B. Ed. Business Education programs do you see? (Please list)

____

____

123. How much do you like the type of training provided the by Faculty of Education at UTECH?

Very Much _____

Fairly Much _____

Dislike slightly or greatly _____

124. To what extent does your current job give you the opportunity to use knowledge learnt in the B. Ed. program?

To a high degree _____

Moderately ______

To a less degree ______

125. Do you wish you attended a different institution rather than UTECH?

YES ________ NO _________ NOT SURE ________

126. If you would start college all over again, would you still attend the same Faculty of Education at UTECH, where you got your degree from?

YES _______ NO _________ NOT SURE _________

127. Would you recommend this program to a friend/relative?

YES _______ NO _________ NOT SURE _________

128. Was the B. Ed. degree important to your getting a job?

YES ______ NO _________ NOT SURE _________

129. Did getting the degree improve your pay?

YES ______ NO _________ NOT SURE _________

130. What are the concerns of the B. Ed. program participants regarding the implementation of this program? (Please state)

Section B

131. What is your gender?

Male _________ Female ___________

132. What is your age range?

Below 25 ___________ 25 - 30 _____________

31 - 35 _____________ 36 - 40 _____________

Above 41 ___________

133. Which year did you graduate from the B. Ed. Business Education programs at UTECH?

(Please state) ______________________________________

134. What was your area of specialization?

Business Studies ___________ Secretarial Studies ______________

135. Which of the following best describes your level of education (please select the highest level obtained).

a. Diploma __________

b. Bachelors Degree _________

c. Masters Degree _______

d. Other (please specify) ________

136. How many years of teaching experience do you have since obtaining you Bachelors degree in Education?

None ___________

1- 5 years _________

6 - 10 years ________

Above 10 years _________

137. What is your present employment status?

a. Part - time ____________

b. Full - time ____________

138. Are you currently attending college?

YES _______ NO ___________

139. If yes, which college? (Please state)

____

140. What is your Nationality?

Jamaican ________________

Other (Please state) ________________

Thank you for your cooperation in completing this questionnaire.

Appendix B

Instructor Questionnaire

Questionnaire for Instructors

Section A: Part One

INSTRUCTIONS: Please read the following statements carefully, and then circle the number that expresses the degree to which you agree with each of the statements. Your thoughtful answers to these items will provide useful information for improving the B. Ed. Business Education programs in UTECH.

KEY:

Strongly Disagree	(SD)	= 1
Disagree	(D)	= 2
Agree	(A)	= 3
Strongly Agree	(SA)	= 4

Program Quality

		SD	D	A	SA
1.	The B. Ed. Business Education programs is meeting graduates employers' needs.	1	2	3	4
2.	The teaching staff of the B. Ed. Business Education programs are academically adequate.	1	2	3	4
3.	The length of the summer teaching sessions is adequate for preparing skillful teachers.	1	2	3	4
4.	My expectations of what students can learn from the B. Ed. Business Education programs are high.	1	2	3	4
5.	The work load in the B. Ed. Business Education program is manageable.	1	2	3	4
6.	There is not a sufficient variety of courses in the B. Ed. Business Education programs.	1	2	3	4

		SD	D	A	SA
7.	The modular degree program allows students to proceed at their own pace.	1	2	3	4
8.	Students learn as much as they expect to learn from the B. Ed. Business Education program.	1	2	3	4
9.	I like the way the B. Ed. Business Education programs is organized.	1	2	3	4
10.	Overall, students in the B. Ed. Business Education programs achieve outstanding academic performance.	1	2	3	4
11.	I am not satisfied with the entry requirements into the B. Ed. Business Education programs.	1	2	3	4
12.	The B. Ed. Business Education programs is useful to students.	1	2	3	4
13.	The B. Ed. program makes students aware of current issues in Business Education.	1	2	3	4
14.	The pace of instruction in the B. Ed. program is adequate.	1	2	3	4
Instructor Self-Evaluation					
15.	I encourage the B. Ed. students to share their knowledge in class.	1	2	3	4
16.	I am aware of the academic needs of the B. Ed. students.	1	2	3	4
17.	I have an enthusiasm for teaching in the B. Ed. program.	1	2	3	4
18.	I present materials in an organized manner in my classes.	1	2	3	4

		SD	D	A	SA
19.	I have good working relationship with my B. Ed. students.	1	2	3	4
20.	I enjoy having the B. Ed. students come to me for consultation.	1	2	3	4
21.	I am not available during consultation hours.	1	2	3	4
22.	I stimulate the interest of B. Ed. students in my course.	1	2	3	4
23.	I motivate my B. Ed. students to study hard.	1	2	3	4
24.	I make the objectives of the course clear to students.	1	2	3	4
25.	I accomplish my B. Ed. course objectives.	1	2	3	4
26.	My B. Ed. students gain new ideas and views from my course.	1	2	3	4
27.	I do not use the B. Ed. class time effectively.	1	2	3	4
28.	I communicate clearly the grading standards to my B. Ed. students.	1	2	3	4
29.	My tests/examinations reflect the materials covered during instruction.	1	2	3	4
30.	I make adequate comments on my B. Ed. students' assignments/tests.	1	2	3	4
31.	I grade students fairly.	1	2	3	4
32.	I always keep my B. Ed. students informed about their academic progress.	1	2	3	4
33.	I am receptive to the B. Ed. students' questions in class.	1	2	3	4
34.	I correct assignments/tests on time, and provide immediate feedback to my B. Ed. students.	1	2	3	4

		SD	D	A	SA
35.	The B. Ed. students do not compete with each other in my course.	1	2	3	4
36.	The B. Ed. students have established interest in the course I teach.	1	2	3	4
37.	The class attendance of my B. Ed. students is good.	1	2	3	4
38.	I provide B. Ed. students with effective guidelines such as handouts and notes.	1	2	3	4
39.	I actively support the goals and objectives of the faculty and the university.	1	2	3	4
40.	I maintain a professional and cooperative attitude when dealing with my colleagues.	1	2	3	4
41.	My course fits into the larger goals and objectives of the B. Ed. program.	1	2	3	4
42.	I was involved in setting the goals and objectives of the B. Ed. program.	1	2	3	4
43.	There is effective communication between the academic staff and me in the B. Ed. program.	1	2	3	4

Part Two

INSTRUCTIONS: Please read the following items carefully, and fill-in the responses that best express your answers to each of the following items. Your thoughtful answers to these items will provide useful information for improving the B. Ed. Business Education programs in UTECH.

Students' Performance

44. How will you classify the performance of students in the B. Ed. Business Studies programs at UTECH?

Outstanding ________ Good __________

Above average _______ Average ________

Below average _______ Weak __________

45a. Do students in the B. Ed. Business Studies programs show outstanding performance when compared with other students in the degree program?

YES ____________ NO _____________

b. If yes, what makes their performance outstanding? (Please state)

____

____

c. If no, what makes their performance poor? (Please state)

____

____

46. How would you classify the performance of the students in the B. Ed. Secretarial Studies program at UTECH?

Outstanding ________ Good __________

Above average _______ Average ________

Below average _______ Weak __________

47a. Do students in the B. Ed. Secretarial Studies program show outstanding performance when compared with other students in the degree program?

YES ____________ NO _____________

b. If yes, what makes their performance outstanding? (Please state)

____

____

c. If no, what makes their performance poor? (Please state)

____

____

48. What is the grade distribution like in your course? (Write your response against each of the statements below). Example: Negatively, Positively skewed, Fairly normal, etc.

a. Student performance in the B. Ed. examinations ______________

b. Student performance in the B. Ed. mid-term tests ______________

c. Student performance in the B. Ed. assignments ______________

49a. Are the B. Ed. Business Education students well behaved?

YES ____________ NO ____________

b. If no, what is responsible for the bad behavior? (Please state)

____

____

50a. What are the students' attitudes toward studying in the B. Ed. Business Education programs? (Please state)

____

____

b. Does the modular system at UTECH take into account the characteristics of the students in the program? (Please state)

____

____

51a. Do students know significantly more about Business Education at the end of each module than they did at the beginning?

YES ___________ NO ____________

b. If yes, how significant is their knowledge? (Please state)

____

____

c. If no, what is the reason for their lack of knowledge? (Please state)

____

____

Quality and Adequacy of Course Content

52. How adequate is the B. Ed. curriculum in meeting the academic needs and expectations of employers?

Not adequate ________

Adequate __________

Very adequate _________

53. How often is the B. Ed. curriculum revised?

Not often ____________

Often ________________

Very often _____________

54. Does the B. Ed. curriculum meets the teaching career needs of its students?

YES ____________ NO _____________

55a. Would you like to see changes made in the B. Ed. curriculum you are using?

YES ____________ NO _____________

b. If yes, what type of changes? (Please list)

____

____

56a. Are the contents of the courses in the B. Ed. program up-to-date with modern technologies?

YES ____________ NO _____________

b. If no, what can be done to bring them up-to-date? (Please state)

____

____

57a. Are the courses in the B. Ed. program well organized?

YES ____________ NO _____________

b. If no, what can be done to make the courses more organized? (Please state)

____

____

58. What course(s) do you teach in the B. Ed. Business Education programs? (Please state)

____

59a. Does the course(s) you teach overlap in content with another course(s) in the B. Ed. program?

YES ____________ NO ____________

b. If yes, which course(s) overlaps? (Please state)

____

____

60a. How would you improve the course you teach? (Please tick any of the following responses that apply)

a.________ Clarify the course objectives
b.________ Improve the tests/assignments used in the course
c.________ Improve the teaching materials
d.________ Provide more information
e.________ Slow down the pace of the course
f.________ Reduce the content covered in the course
g.________ Increase the content covered in the course
h.________ Up-date the content covered in the course

b. What other improvements would you recommend in the course you teach? (Please state)

____

____

Quality of Instruction

61. What type of teaching methods do you use? (Please list)

____

____

62. Why are these methods used? (Please state)

____

____

63. Do you discuss instructional approaches with the students in the B. Ed. program?

YES ____________ NO ____________

64a. Is the amount of instruction given in each course sufficient?

YES ____________ NO ____________

b. If no, what makes it insufficient? (Please state)

____

____

65a. Are the difficulty levels of the instruction adequate?

YES ____________ NO ____________

b. If no, what makes it inadequate? (Please state)

____

____

Quality and Adequacy of Resources

Books/Journals

66a. Does the Faculty of Education and Liberal Studies subscribe to educational/professional journals?

YES __________ NO ____________

b. If yes, which ones? (Please state)

____

____

67. Do you find library books/journals available to use for the course you teach?

Not available _________

Available ___________

Always available ________

68. Do you find library books/journals adequate for the course you teach?

Not adequate ________

Adequate _________

Very adequate ________

Materials

69. Are the materials such as texts, overhead/transparencies, audio/video tapes/recorders, slides and films used in your teaching up-to-date?

YES ___________ NO ____________

70. Do you have sufficient supply of these materials?

YES __________ NO ____________

71a. Did the Faculty of Education and Liberal Studies provide your office with a computer and printer?

YES __________ NO ___________

b. If no, do you make use of the general computer labs?

YES __________ NO ___________

72. Do you find the general computer labs adequate?

YES __________ NO ___________

Personnel

73. To what extent are the library workers helpful?

Not helpful __________

Helpful _____________

Very helpful __________

74. To what extent are the library workers pleasant to you?

Not very pleasant _________

Pleasant ____________

Very pleasant ___________

75. Do you find the computer lab assistants helpful?

YES __________ NO ___________

76. Do you find the computer lab assistants pleasant?

YES __________ NO ___________

77. Are the members of administrative staff in the Faculty of Education and Liberal Studies helpful?

YES __________ NO ___________

78. Are the members of administrative staff in the Faculty of Education and Liberal Studies pleasant?

YES __________ NO ___________

79a. Do you consider the number of administrative staff in the B. Ed. Business Education program adequate?

YES __________ NO ___________

b. If no, how many more staff are needed? (Please state)

____

80. Do you consider the number of teaching staff in the B. Ed. Business Education program adequate?

YES __________ NO ____________

b. If no, how many more staff are needed? (Please state)

____

Facilities

81a. Is your office space conducive for academic work?

YES __________ NO ____________

b. If no, what can be done to improve it? (Please state)

____

____

82a. Do you find the classrooms comfortable to teach in?

YES __________ NO ____________

b. If no, what can be done to improve it? (Please state)

____

____

Quality of Evaluation

83. What type of method do you use in evaluating your B. Ed. Business Education students?

____

____

84a. Do B. Ed. students make inputs into the type of evaluation used?

YES _____________ NO _____________

b. If yes, what kind of inputs do they make? (Please state)

____

____

85a. Are you satisfied with the grading system used in the B. Ed. program?

YES _____________ NO _____________

b. If no, what type of changes would like to see? (Please state)

____

86a. Are you given sufficient time to grade students work in the B. Ed. program?

YES __________ NO __________

b. If no, what length of time do you need? (Please state)

____

____

87a. Are you satisfied with the B. Ed. examination procedures?

YES __________ NO __________

b. If no, which areas are you dissatisfied with? (Please state)

____

____

88a. Are you satisfied with the examination environment at UTECH?

YES __________ NO __________

b. If no, what can be done to improve the examination environment? (Please state)

____

____

89. Are the B. Ed. examinations well organized?

YES __________ NO __________

90a. Are you evaluated in the B. Ed. programs?

YES __________ NO __________

b. If yes, how adequate is the staff evaluation in the B. Ed. programs?

Not adequate _______

Adequate _______

Very adequate _______

Part Three

91. What are the major strengths and weaknesses of the B. Ed. Business Education programs at UTECH? (Please state)

Strengths:

____

____

____

Weaknesses:

____

____

____

92. What factors enhance the implementation of the B. Ed. program? (Please state)

____

____

93. What factors affect the implementation of the B. Ed. program? (Please list)

____

____

94. What future threats to the success of the B. Ed. program do you see? (Please state)

____

____

95. What can be done to safe guard against these threats? (Please state)

____

____

96. What areas of the B. Ed. Business Education program would you like to see improved? (Please state)

____

____

Work load

97. How many hours per week do you spend in the classroom during the summer program? (Please state) ______________________________

98. How many hours per day does it take to prepare for your summer teaching?
(Please state) ____

99. On the average, how much time do you spend in the supervision of, and consultation with, students?
(Please state) ____

100. Are you available during consultation hours?
YES ________ NO __________

101. How many courses do you teach in the following summer programs?
- a. Diploma ________________
- b. B. Ed. __________________
- c. Others (Please specify) ______________________________

102a. Are you involved in any academic research?
YES ______ NO _______

b. If yes, please describe.
____
____

103. On the average, how many hours do you spend on your research work/professional writing? (Please state)
____

104a. Do you read educational/professional journals?
YES _________ NO __________

b. If yes, which educational/professional journal do you read? (Please state)
____

c. If yes, how often?
____

105a. Is the pay for the B. Ed. summer teaching sufficient?
YES _________ NO __________

b. If no, what could be done to improve the pay? (Please state)
____

Section B

106a. Are you currently attending college?

YES __________ NO ___________

b. If yes, which institution? (Please state) ______________________________

107. Which of the following best describes your level of education? (Please circle the highest level obtained).

a. Diploma
b. Bachelors Degree
c. Two Bachelors Degrees
d. Masters Degree
e. Doctor of Philosophy
f. Other (Please specify) ______________________________________

108. How many years of teaching experience do you have in the following programs?

a. Diploma ____
b. B. Ed. ____
c. Other (Please specify) ______________________________________

109. What is your present employment status in UTECH?

a. Part - time __________
b. Full - time __________

110. What is your gender?

Male ________

Female ________

111. What is your Nationality?

Jamaican ___________

Other (Please specify) ________________

Thank you for your cooperation in completing this questionnaire.

Appendix C

Graduate Teacher Appraisal Scale

Graduate Teacher Appraisal Scale

Section A

INSTRUCTIONS: Please, fill in the blank spaces beside each information for the ratee.

Sex: Male____ Female ____

Job Title______________________

Date Employed__________________

Educational Qualifications: Diploma _____ B. Ed. _______

M. Ed. ______ Others (Please specify)___________

Rater: Principal ________ Head of Business Studies Department_______

Key:

1: Unacceptable work performance
2: Below average work performance
3: Average work performance
4: Above average work performance
5: Good work performance
6: Excellent work performance

Section B

INSTRUCTIONS: Rate the Business Education teacher by circling a number (1-2-3-4-5-6) for each characteristic.

Teacher on - the - Job Characteristics

1. **Teaching Effectiveness:** teaching skills, knowledge of business studies procedures, principles, methods; follow through on assignments; getting along with other teachers; productivity.

   1 2 3 4 5 6

2. **Delivery:** skillful, neat, organized, thorough, detects, and correct errors.

   1 2 3 4 5 6

3. **Environmental Organization:** effectively arranges physical environment to promote instruction.

1 2 3 4 5 6

4. **Resources/Materials:** uses a variety of appropriate materials to enhance teaching.

1 2 3 4 5 6

5. **Classroom Management:** manages and reinforces established classroom roles and routines; monitors student behaviors and uses a variety of management strategies; maintains condition for effective learning and dealing with disruptive behaviors.

1 2 3 4 5 6

6. **Output of work:** meets teaching schedules, routinely and in emergencies; produces consistent work flow up to job standards.

1 2 3 4 5 6

7. **Dependability:** carries out routine and teaching assignments on time; consistent application to duties; levels of absenteeism, tardiness, and integrity.

1 2 3 4 5 6

8. **Adapting to need/Flexibility:** adaptability to work tasks; capacity to change; willingness to assume new tasks and responsibilities.

1 2 3 4 5 6

9. **Poise and Appearance:** stability, self-control, clean and neat; creates favorable impression; pleasing manner; good health; friendliness.

1 2 3 4 5 6

10. **Communication Skills:** able to communicate, verbally, and written, with students, colleagues, parents, and administrators.

1 2 3 4 5 6

11. **Motivation and initiative:** eager to learn, accept work, and responsibilities, enjoys new challenges.

1 2 3 4 5 6

12. **Growth Potential:** actively participates and seeks opportunities for professional development; ability to plan, make teaching improvements, enjoys study, creativity, resourcefulness, and ambitious.

1 2 3 4 5 6

13. **Attitude:** punctual, responsible, courteous, tolerant, considerate, helpful, cooperative, sincere, shares ideas, dedicated to work, fair with students and other teachers.

1 2 3 4 5 6

14. **Supervision Reaction:** accepts and follows supervision; no resentment for instructions or guidance; engages in meaningful teacher/supervisor dialogue; considers the supervisor a friend.

1 2 3 4 5 6

Section C

Summary and Recommendations

A. Principal/Head of Business Education Department's Evaluation:

1. B. Ed. Business Education teacher's strong areas are:

____

____

2. B. Ed. Business Education teacher's weak areas are:

____

____

3. Comparison of this teacher with other graduate teachers in your school. (Circle one for each row):
    - a. Job performance (Weaker, Same, Stronger)
    - b. Training (Adequate, Less adequate)
    - c. Attitude (More negative, Same, More positive)

B. Principal/Head of Business Studies Department's Recommendations on areas that need improvement: ________________________________

____

C. Rater's signature: ____________________ Date:________________

Thank you for your cooperation in completing this scale.

Appendix D

Interview Guide

List of Persons Interviewed

Interview Guide

Name ____________________ Date____________________

Venue____________________ Duration ________________

Purpose of the interview

The general aim of this interview is to collect information from the interviewees on the B. Ed. Business Education programs that will help in the evaluation of these programs.

Procedure

Introduction

a. Greetings.

b. Inform the interviewee(s) about confidentiality of information given; notes will not contain names of the person(s) interviewed. When it is necessary to disclose the identity of the interviewee(s), permission will be obtained.

c. Inform the interviewee(s) about their rights to withdraw at any time without prejudice.

d. Request for permission to tape the interview.

e. Inform the interviewee(s) about the duration of the interview, which will be about 50 minutes.

Opening question: To get the interviewee(s) relaxed and comfortable with the interview a general question will be able asked.

Lead Questions

Questions will be asked from the following areas:

Context Evaluation Questions:

1. Is there a mission statement for the B. Ed. Business Studies and Secretarial Studies programs?

   -What is the mission statement of the B. Ed. Business Studies and Secretarial Studies programs?

   -Who was responsible for the formulation of the mission statement?

   -When was the mission statement formulated?

2. Is there a program philosophy for the B. Ed. Business Studies and Secretarial Studies programs?

   -What is the program philosophy of the B. Ed. Business Studies and Secretarial Studies programs?

   -Who was responsible for the formulation of the program philosophy?

   - When was the program philosophy formulated?

3. Are there goals and objectives for the B. Ed. Business Studies and Secretarial Studies programs?

   -What are the goals and objectives of the B. Ed. Business Studies and Secretarial Studies programs?

   -Who was responsible for the formulation of the program goals and objectives?

   - When were the program goals and objectives formulated?

4. What are the expected student outcomes of the B. Ed. Business Studies and Secretarial Studies programs?

   -Who was responsible for the formulation of the expected student outcomes?

   -When were the expected student outcomes formulated?

5. Do the program goals and objectives, the expected learning outcomes, and the philosophy serve as effective guides for the implementation of the B. Ed. Business Studies and Secretarial Studies programs?

6. Who are the persons to be served by the Business Studies and Secretarial Studies programs?

Input Evaluation Questions:

7. What is the structure and composition of the Business Studies and Secretarial Studies programs?

8. What is the administration and governance structure of the Business Studies and Secretarial Studies programs?

   -How effective is the governance and administrative structure of the Business Studies and Secretarial Studies programs?

9. What is the intended and actual number of instructional staff and their educational qualifications?

   -Is the number stated adequate?

-What is the qualification needed by the instructors?

-How are the instructional staff recruited?

-Are the instructional staff involved in academic research/professional writing?

10. What is the intended and actual number of students in the two programs?

-Is the number stated adequate for the resources provided?

-What is the entry qualification needed by the students?

-How are the students selected?

11. What resources are made available for the implementation of the Business Studies and Secretarial Studies programs?

-Please comment on the quality and adequacy of the teaching materials and facilities:

-Library: adequacy and availability of holdings of books and periodicals; adequacy of lending policies; adequacy and availability of reading space and operating hours.

-Classrooms: adequacy and availability of classrooms; chairs and tables; and fans.

-Computer labs: adequacy and availability of computers and printers; operating hours; and adequacy of soft-wares

- Adequacy and availability of office space and reading space.

-Adequacy and availability of student services.

12. How are the B. Ed. Business Studies and Secretarial Studies programs funded?

-Are there financial aids for the students?

Process Evaluation Questions:

13. Who was responsible for developing the Business Studies and Secretarial Studies programs curricula?

14. What is the intended and actual curricula for the Business Studies and Secretarial Studies programs?

15. Has there been a curriculum revision for the Business Studies and Secretarial Studies programs?

16. How important and relevant are the courses offered in the Business Studies and Secretarial Studies programs?

17. Do the courses meet the needs and expectations of the students' and their employers?
18. What are the instructional methods used by the instructors?
19. What is the quality of instruction in the B. Ed. programs?
20. How are the students evaluated (course work assessment, examinations, grading system, progress reports)?
    -How well do the students perform in the programs?
    -How well do the graduates perform in their jobs as teachers?
    -Compare the job performance of the B. Ed. graduates with other graduates.
21. What is your general view of the program quality?
    -What are students' behaviors/attitudes toward the programs?
    -Do students have good staff/student relationship?
22. Has there been any formal program evaluation for the B. Ed. programs?

Product Evaluation Questions:

23. What are the strengths and weaknesses of the B. Ed. program?
24. What are the. factors that enhance and or affect implementation of the B. Ed. programs?
25. What are the threats to the success of the B. Ed. programs?
26. What areas of the B. Ed. programs need improvement, and why?

Closing remarks:

a. Comments regarding the interview
b. Further contact(s) to be made if needed
c. Thank the interviewee(s)
d. Cordial parting

List of Persons Interviewed

Name	Date	Time	Venue
Mrs. E. Chambers (Project Officer)	May 19, 1999	2 p.m.	CIDA, Canadian High Commission
Dr. A. Sangster (Former President)	May 20, 1999	10.30 a.m.	CAFÉ Office, 137 Maxfield Ave.
Mrs. G. Sayers (Sr. Edu. Officer)	May 25, 1999	9 a.m.	Min. of Education, Caenwood Complex
Dr. V. Lewis (Dean)	May 31, 1999	10 a.m.	Faculty of Edu. & Liberal Studies
Mrs. C. Williams (Sr. Edu. Officer)	June 2, 1999	10 a.m.	Business Education Unit
Mrs. D. Reynolds (Director, HRM)	June 3, 1999	2.30 a.m.	Human Resource Officer, Adm. Bld.
Mrs. H. Salmon (Librarian)	June 3, 1999	3.15 p.m.	UTECH Library
Mrs. L. Samuels (Head)	June 9, 1999	1 p.m.	Dept. of Humanities & Liberal Studies
Mr. H. Johnson (Head)	June 16, 1999	8.30 a.m.	School of Technical & Vocation Edu.
Dr, Rae Davis (President)	June 17, 1999	3 p.m.	President's office Admin. Bld.
Mrs. R. Edwards (Sr. Edu. Officer)	Dec. 6, 1999	1 p.m.	Min. of Education, Caenwood Complex
Ms. D. Comrie (B. Ed. Coordinator)	Jan. 6, 2000	10 a.m.	B. Ed. Coordinator's office
Mr. G. Roper (Vice-President)	–	–	–

Appendix E

Classroom Observation Scale

Classroom Observation Rating Scale

Section One: Part A

INSTRUCTOR: ____________________ COURSE: ____________
NUMBER OF STUDENTS PRESENT: __________ DATE: ____________
PROGRAM OF STUDY: ________________ MODULE: ____________
OBSERVER: ____

Section One: Part B

INSTRUCTIONS: Respond to each of the statements below by circling the number which most closely corresponds to your observation.

KEY:

Not Applicable = NA
Poor = 1
Needs Improvement = 2
Satisfactory = 3
Very Satisfactory = 4
Excellent = 5

SUITABILITY OF CONTENT:

1.	The material presented is related to course objectives in the outline.	NA	1	2	3	4	5
2.	Students seem to have entry knowledge of the lecture material.	NA	1	2	3	4	5
3.	The examples used drew upon student's experiences.	NA	1	2	3	4	5
4.	Used clear and simple examples.	NA	1	2	3	4	5
5.	A sufficient amount of material was included in the lecture.	NA	1	2	3	4	5

ORGANIZATION OF CONTENT:

The instructor:

6.	Stated the purpose of the lecture.	NA	1	2	3	4	5

7. Presented a brief overview of the lecture content. NA 1 2 3 4 5

8. Arranged and discussed the content in a systematic and organized fashion. NA 1 2 3 4 5

9. Summarized the main ideas in the lecture. NA 1 2 3 4 5

10. Restated what students were expected to gain from the lecture. NA 1 2 3 4 5

PRESENTATION STYLE:

11. Voice could be easily heard. NA 1 2 3 4 5

12. Established eye contact with the students in the class. NA 1 2 3 4 5

13. Listened carefully to student comments and questions. NA 1 2 3 4 5

14. Demonstrated enthusiasm for the subject matter. NA 1 2 3 4 5

15. Used instructional aids to facilitate important points. NA 1 2 3 4 5

16. Defined terms, concepts, and principles. NA 1 2 3 4 5

17. Encouraged students to answer questions by providing cues. NA 1 2 3 4 5

Evaluation Methods:

18. Repeated answers when necessary so the entire class could hear. NA 1 2 3 4 5

19. Assigned readings for next class meeting. NA 1 2 3 4 5

20. Responsive to students questions. NA 1 2 3 4 5

21.	Asked questions periodically to determine whether students understood the lecture.	NA	1	2	3	4	5
22.	Encourages students to ask and answer questions.	NA	1	2	3	4	5

Section Two

23. **COMMENTS:**

(Please record your observation of each the variables in the space provided)

A. Clarification of objectives ______________________

B. Instructional methods ______________________

C. Course activities ______________________

D. Course organization ______________________

E. Pace of the class ______________________

F. Time allotted for the class ______________________

24. What is least valuable about this class?

____

____

25. What is most valuable about this class?

____

____

Thank you for your cooperation in completing this scale.

Appendix F

Approval Letters

University of Alberta,
Faculty of Education,
Dept. of Educational Psychology,
Edmonton AB, T6G 2G5
Canada

May 1, 1998

The President,
Dr. Rae Davis,
University of Technology,
Jamaica

Dear Sir,

Until very recently, I was a staff of the Department of Technical Education, University of Technology, Jamaica. Currently, I am a doctoral candidate at the above University with special interest in Educational Measurement and Evaluation. After due consultations with my program advisor, Professor Todd Rogers, I have decided to work on a subject that may be of developmental relevance to the University of Technology, Jamaica. My initial readings reveal that an independent evaluation of the University's programs in general, and those of the Department of Technical Education (the B. Ed. Business Education programs) in particular, would be worth undertaking and beneficial to the University and me. This is why I am seeking to meet with you in order to have your opinion on this matter. Thanks for your cooperation.

Yours sincerely,

Cynthia Onyefulu

C/O Faculty of Education and Liberal Studies,
University of Technology,
Jamaica.
May 11, 1999.

11/5/99

The President,
Dr. Rae Davis,
University of Technology,
Jamaica.

Dear Sir,

Permission to Conduct Evaluation Study

Project Title: The Business Education ~~Bachelor of Education~~ Program in the University of Technology, Jamaica: An Evaluation Study.

I met with you last summer to discuss the issue of evaluating the B.Ed Business Education program for the fulfilment of the Ph.D thesis requirement. Accordingly, I write to inform you that the Ph.D thesis Committee of the Faculty of Education, University of Alberta, approved the proposal for this study. I am currently in the Island to conduct the study at the Faculty of Education and Liberal Studies. Secondly, I wish to request for permission to conduct this study. Thirdly, I write to request the participation of all the Business Education degree students and instructors in this evaluation study.

I hope to conduct the study during the 1999 summer degree program. I am also requesting for a convenient date to conduct an individual interview with you. Please if you have any questions or concerns, do not hesitate to call me at 935-8430. Thank you in advance for your cooperation.

Yours Sincerely,
C.N. Onyefulu
Cynthia Onyefulu

CC: Vice Presidents,
Registrar,
Personnel Manager,
Dean, Faculty of Education & Liberal Studies,
Head, School of Technical & Vocational Education,
Head, Dept. of Liberal Studies & Educational Studies,
Head, Business Studies,
B.ED. Program Coordinator,
Examination Coordinator,
Librarian.

RECEIVED
MAY [illegible] 1999

Approved
11/5/99

April 12, 1999

From: Department of Educational Psychology
Research and Ethics Committee

The Research and Ethics Committee of the Department of Educational Psychology has reviewed the attached proposal and finds it acceptable with respect to ethical matters.

Applicant: Dr. W.T. Rogers on behalf of Cynthia Chinyelu Onyefulu
(Graduate Student)

Title: The business education (B.Ed) teacher education program in the University of Technology, Jamaica: An evaluation.

Participating Agency(ies):

____
Chairman or Designate, Research
and Ethics Committee

13 APR 99
Date

c/o Faculty of Education & Liberal Studies,
University of Technology, Jamaica

The Dean,
Faculty of Education & Liberal Studies,
University of technology, Jamaica

Dear Madam,

Request for Faculty Participation in a Research Project

Project Title: The Business Education Bachelor of Education Program in the University of Technology, Jamaica: An Evaluation Study.

I was a lecturer in the Department of Technical Education at this university. Presently, I am pursuing a doctoral study in the Department of Educational Psychology at the University of Alberta in Edmonton, Canada. I am in the Island to conduct an evaluation study to fulfill the requirement for my doctoral program. I am interested in evaluating the B. Ed. Business Education program at the University of Technology, Jamaica (UTECH). The University President, Dr. Rae Davis has given his consent for the evaluation of the B. Ed. Business Education program at UTECH.

Accordingly, I write to request the participation of all the Business Education degree students and instructors in this evaluation study. I would like to suggest that the questionnaires will be personally administered by me and my research assistant to the Business Education degree students and instructors. In addition, focus group interviews with the Business Education degree students will be conducted. Further more, there will be observation of the Business Education classes. I hope to conduct the study during the 1999 summer degree program. I will also request for a convenient date to conduct an individual interview with you.

I hope this period will be convenient for your degree students and instructors. Please if you have any questions or concerns, do not hesitate to call me at 935-8430. Thank you in advance for your cooperation.

Yours Sincerely,
Cynthia Onyefulu

Appendix G
Cover Letters and Consent Form

Cover Letter for the Questionnaire

Dept. of Educational Psychology
Faculty of Education
University of Alberta
Edmonton, AB T6G 2G5
Canada

____

____
____
____

Dear Sir/Madam,

This study is concerned with the evaluation of the B. Ed. Business Education Program with emphasis on the objectives and implementation of the program, and the output of graduands from this program. The attached questionnaire is part of an evaluation study that will be conducted in the University of Technology (UTECH), on the B. Ed. Business education programs by a doctoral (Ph. D.) student, Miss Cynthia Onyefulu, of the University of Alberta.

We would appreciate your responses as they will contribute significantly toward the improvement of the B. Ed. programs in UTECH. The average time required for filling out this questionnaire will be 50 minutes. We will appreciate it if you will complete the enclosed form by the end of this week. Your responses will be held in strictest confidence.

The informed consent procedure for this study are described on the enclosed sheet. Please take a moment now to read it. Please if you have any questions or concerns, do not hesitate to call me at 935-8430. Thank you for your cooperation.

Sincerely yours,

Cynthia Onyefulu

CC: President of UTECH
Dean, Faculty of Education & Liberal Studies

Informed Consent Form

Project Title: Evaluation of UTECH'S Bachelor of Education Business Programs

Dept. of Educational Psychology
Faculty of Education
University of Alberta
Edmonton, AB T6G 2G5
Canada

Dear ________________

The general purpose of this study is to examine the effectiveness of the B. Ed. Business Education program with emphasis on the objectives and implementation of the program, and the output of graduands from this program. A second aim is to critically examine the capacity of the program to fulfill the developmental philosophy which informed the establishment of the business education program in the University of Technology (UTECH).

You are being requested to take part in either a face-to-face interview session or to complete a questionnaire. All sessions of the interview will be audio tape recorded. No one will have access to the information you will give except the evaluator and her research assistants and her thesis committee of the Faculty of Education, University of Alberta.

Participation in this study is strictly voluntary. You do not have to discuss any subject or answer any question which you do not want to respond to. You can withdraw from the study at any time without prejudice. Your name will not appear anywhere in the study as your response will be reported only as part of a group summary.

This is to certify that I, ____________________ (print name), hereby agree to participate in the above project. I have had an opportunity to ask whatever questions or raise any issues of concerns I have in relation to the study and my role in it. All such questions and concerns have been answered to my satisfaction.

______________________	______________________
Signature of Participant	Date
______________________	______________________
Signature of Evaluator	Date
______________________	______________________
Witness	Date

Thank you in advance for your cooperation.

Cover Letter for the Appraisal Scale

Dept. of Educational Psychology
Faculty of Education
University of Alberta
Edmonton, AB T6G 2G5
Canada

____

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____

Dear Sir/Madam,

My name is Miss Cynthia Onyefulu. I am a doctoral student at the University of Alberta. As a requirement for the doctoral program, I am evaluating the B. Ed. Business Education Programs at the University of Technology (UTECH), Jamaica. The President of UTECH has given his approval for this study. As part of the study, I need to know the job performance of the graduate teacher from this program.

Accordingly, I am requesting you to rate the job performance of the B. Ed. Business Education Programs in your school using the attached Appraisal Scale. The rating of the graduate teacher is purely for the study and your ratings will be held and treated in the strictest confidence. I would appreciate your responses as they will contribute significantly toward the improvement of the B. Ed. programs in UTECH. The average time required for filling out this scale will be approximately 30 minutes. I will appreciate it if you will complete this scale by ______________.

Please if you have any questions or concerns, do not hesitate to call me at 935-8430. Thank you for your cooperation.

Sincerely yours,

Cynthia Onyefulu

Appendix H

Follow-up Letters

Follow-up Letter for Students

Faculty of Education and Liberal Studies,
University of Technology, Jamaica,
237 Old Hope Rd.,
Kingston 6.

____

Dear Student,

Re: Student Questionnaire

As part of the data gathering exercise for my thesis, a student questionnaire was given to you to be completed by __________. However, you were unable to meet the deadline line. This is to remind you that the questionnaire is due for collection. As a student in the B. Ed. Business Education program, you have an important contribution to make to this evaluation study. I am please begging you to complete the questionnaire by ______, 1999, as I will be going round the classrooms to collect them. Your feedback would be used for the improvement of this program and I am counting on you for the support. In case you will be absent from school, kindly leave the questionnaire with the B. Ed. degree secretary Ms. C. Heslop.

If there is need to contact me before the date stated above, please call me at 935-8430. Thank you for participating in this study.

Yours sincerely,

C. N. Onyefulu.

Cynthia Onyefulu

Follow-up Letter for Graduates

Faculty of Education and Liberal Studies,
University of Technology, Jamaica,
237 Old Hope Rd.,
Kingston 6.

____

Dear Graduate,

Re: Graduate Questionnaire

As part of the data gathering exercise for my thesis, a graduate questionnaire was given to you to be completed by __________. However, you were unable to meet the deadline line. This is to remind you that the questionnaire is due for collection. As a graduate of the B. Ed. Business Education program, you have an important contribution to make to this evaluation study. I am please asking you to complete the questionnaire by ______, 1999, as I will be going round the schools to collect them. Your feedback would be used for the improvement of this program and I am counting on you for the support. In case you will be absent from school, kindly leave the questionnaire with the principal's secretary.

If there is need to contact me before this date, please call me at 935-8430. Thank you for participating in this study.

Yours sincerely,

C. N. Onyefulu

Cynthia Onyefulu

Follow-up Letter for Instructors

Faculty of Education and Liberal Studies,
University of Technology, Jamaica,
237 Old Hope Rd.,
Kingston 6.

Dear Instructor,

Re: Instructor Questionnaire

As part of the data gathering exercise for my thesis, an instructor questionnaire was given to you to be completed by __________. However, you were unable to meet the deadline line. This is to remind you that the questionnaire is due for collection. As an instructor in the B. Ed. Business Education program, you have an important contribution to make to this evaluation study. I am please requesting you to complete the questionnaire by ______, 1999, as I will be going round the classrooms to collect them. Your feedback would be used for the improvement of this program and I am counting on you for the support. In case you will be absent from school, kindly leave the questionnaire with the B. Ed. degree secretary Ms. C. Heslop.

If there is need to contact me before the date stated above, please call me at 935-8430. Thank you for participating in this study.

Yours sincerely,

Cynthia Onyefulu

Follow-up Letter for Principals

Faculty of Education and Liberal Studies,
University of Technology, Jamaica,
237 Old Hope Rd.,
Kingston 6

____

The Principal

____

____

Dear Sir/Madam,

Re: Appraisal Scale

As part of the data gathering exercise for my thesis, an appraisal scale for rating of the B. Ed. Business Education graduate teacher job performance was given to you to be completed by __________. However, you were unable to meet the deadline line. This letter is to remind you that the appraisal scale is due for collection. As an employer of the B. Ed. Business Education graduate, you have an important contribution to make to this evaluation study. Your feedback would be used for the improvement of this program. I am please begging you to complete the appraisal scale by ______, 1999, as I will be going round the schools to collect them. In case you will be absent from school, kindly leave the with the appraisal scale with your school secretary.

If you have further questions, please contact me at 935-8430. Thank you for participating in this study.

Yours sincerely,

Cynthia Onyefulu

Appendix I

Letter to Interviewees

Letter to Interviewees

c/o Faculty of Education & Liberal Studies
University of Technology
237 Old Hope Rd
Kingston

May 28, 1999

____
____
____

Dear Sir/Madam,

Request for Individual Interview

My name is Cynthia Onyefulu. I am a Ph. D. student at the University of Alberta. I am conducting an evaluation study of the B. Ed. Business Education programs at UTECH, for which the President of UTECH has given his approval. As part of the study, I will be interviewing stakeholders of these programs. Consequently, I am writing the letter to request the permission to interview you.

I will be glad if you can choose a convenient time and location for this interview. During the interview I will ask you questions about the B. Ed. Business Education programs at UTECH and you responses can only be audio-taped with your permission. Participation is voluntary and should you decide to withdraw from the study at any time, you may do so without prejudice. Please, if you require more information or clarifications, do not hesitate to call me at 935-8430. Thank you in advance for your cooperation.

Yours Sincerely,

Cynthia Onyefulu

Appendix J

ANOVA Summary Tables

Input Evaluation Tables

Table 22 (see p. 129)

Comparison of Modules One to Three Students and Graduates: Expected Academic Performance using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	4.184	3	1.395	1.165	0.324
Specialization (S)	0.046	1	0.046	0.039	0.844
M x S	2.351	3	0.784	0.654	0.581
Error	280.163	234	1.197		
Total	11078.000	241			

Note. The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
$p < 0.01$

Table 22 (see p. 129)

Comparison of Modules One to Three Students and Graduates: Reasons for Enrolling in the B. Ed. Programs using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	2.286	3	0.762	2.251	0.083
Specialization (S)	1.413	1	1.413	4.173	0.042*
M x S	0.353	3	0.118	0.347	0.791
Error	79.212	234	0.339		
Total	83.570	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
*$p < 0.01$

Process Evaluation Tables

Table 23 (see p. 131)

Comparison of Students in the Three Modules and Graduates: Program Quality using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules	966.11	3	322.04	20.111	0.001*
(M)Specialization	6.01	1	6.01	0.375	0.541
(S)	75.61	3	25.20	1.574	0.196
M x S	3747.00	234	16.01		
Error	4886.63	241			
Total					

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$*p < 0.01$

Table 24 (see p. 134)

Comparison of Modules One to Three Students and Graduates: B. Ed. Program Orientation using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	19.406	3	6.469	8.252	0.000*
Specialization (S)	1.413	1	1.413	1.802	0.181
(M x S)	1.654	3	0.551	0.703	0.551
Error	183.429	234	0.784		
Total	206.579	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$*p < 0.01$

Table 25 (see p. 135)

Comparison of Modules One to Three Students and Graduates: Appropriateness and Clarity of Course Objectives using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	45.869	3	15.290	20.552	0.000*
Specialization (S)	0.058	1	0.058	0.078	0.780
(M x S)	1.237	3	0.412	0.554	0.646
Error	174.084	234	0.744		
Total	222.397	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$*p < 0.01$

Table 25 (see p. 135)
Comparison of Modules One to Three Students and Graduates: Students/Graduates Needs and Expectations using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	23.837	3	7.946	14.225	0.000*
Specialization (S)	0.094	1	0.094	0.169	0.682
(M x S)	0.716	3	0.239	0.427	0.733
Error	130.704	234	0.559		
Total	156.281	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$*p < 0.01$

Table 25 (see p. 135)
Comparison of Modules One to Three Students and Graduates: Employers' Needs and Expectations using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	14.474	3	4.825	13.271	0.000*
Specialization (S)	0.205	1	0.205	0.565	0.453
(M x S)	2.026	3	0.675	1.857	0.138
Error	85.068	234	0.364		
Total	101.669	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$*p < 0.01$

Table 26 (see p. 138)
Comparison of Modules One to Three Students: Adequacy of Courses using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	211.356	3	70.452	12.235	0.000*
Specialization (S)	16.392	1	16.392	2.847	0.093
(M x S)	10.732	3	3.577	0.621	0.602
Error	1347.461	234	5.758		
Total	1576.579	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$*p < 0.01$

Table 27 (see p. 140)

Comparison of Modules Two to Three Students and Graduates: Seminar Component using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	7.219	2	3.610	4.910	0.008*
Specialization (S)	1.372	1	1.372	1.866	0.173
(M x S)	0.443	2	0.221	0.301	0.740
Error	147.779	201	0.735		
Total	156.937	206			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 28 (see p. 143)

Comparison of Module Three Students and Graduates: Work Experience Component using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	2.794	1	2.794	3.613	0.059
Specialization (S)	0.483	1	0.483	0.625	0.430
(M x S)	0.089	1	0.089	0.115	0.734
Error	126.868	164	0.774		
Total	129.994	167			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 30 (see p. 150)

Comparison of Modules One to Three Students and Graduates: Importance of Module One Courses using ANOVA Procedure

Course	Source of Variation	Sum of Squares	df	MS	F	p
Communication Skills	Modules (M)	4.924	3	1.641	4.707	0.003*
	Specialization (S)	0.316	1	0.316	0.908	0.342
	(M x S)	1.576	3	0.525	1.507	0.213
	Error	81.584	234	0.349		
	Total	87.723	241			
Research Methods 1	Modules (M)	2.731	3	0.910	2.233	0.085
	Specialization (S)	0.031	1	0.031	0.076	0.783
	(M x S)	1.235	3	0.412	1.010	0.389
	Error	95.375	234	0.408		
	Total	99.124	241			
Data Processing 1	Modules (M)	7.742	3	2.581	4.607	0.004*
	Specialization (S)	0.075	1	0.075	0.133	0.715
	(M x S)	0.027	3	0.009	0.016	0.997
	Error	131.076	234	0.560		
	Total	138.979	241			
Business Law	Modules (M)	3.965	3	1.322	4.129	0.007*
	Specialization (S)	0.864	1	0.864	2.698	0.102
	(M x S)	2.497	3	0.832	2.601	0.053
	Error	74.893	234	0.320		
	Total	81.360	241			
Small Business 1	Modules (M)	4.032	3	1.344	3.078	0.028*
	Specialization (S)	0.050	1	0.050	0.115	0.735
	(M x S)	0.657	3	0.219	0.502	0.681
	Error	102.193	234	0.437		
	Total	106.897	241			
Seminar	Modules (M)	13.841	2	6.920	11.482	0.000*
	Specialization (S)	0.082	1	0.028	0.047	0.828
	(M x S)	2.530	2	1.265	2.099	0.125
	Error	121.146	201	0.603		
	Total	137.749	206			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalance model.

*$p < 0.01$

Table 30 (see p. 150)

Comparison of Modules One to Three Students and Graduates: Relevance of Module One Courses using ANOVA Procedure

Course	Source of Variation	Sum of Squares	df	MS	F	*p*
Communication Skills	Modules (M)	1.753	3	0.584	2.097	0.101
	Specialization	4.992	1	4.992	17.912	0.000*
	(S)	8.521	3	2.840	10.193	0.000*
	(M x S)	65.209	234	0.279		
	Error	80.120	241			
	Total					
Research Methods 1	Modules (M)	2.615	3	0.872	2.517	0.059*
	Specialization	0.008	1	0.008	0.023	0.879
	(S)	1.434	3	0.478	1.381	0.249
	(M x S)	81.026	234	0.346		
	Error	85.669	241			
	Total					
Data Processing 1	Modules (M)	5.068	3	1.689	3.618	0.014*
	Specialization	0.115	1	0.115	0.245	0.621
	(S)	0.129	3	0.043	0.092	0.964
	(M x S)	109.267	234	0.467		
	Error	114.500	241			
	Total					
Business Law	Modules (M)	1.491	3	0.497	2.519	0.059*
	Specialization	0.028	1	0.028	0.139	0.709
	(S)	0.415	3	0.138	0.702	0.552
	(M x S)	46.162	234	0.197		
	Error	48.417	241			
	Total					
Small Business 1	Modules (M)	1.475	3	0.492	1.833	0.142
	Specialization	0.349	1	0.349	1.301	0.255
	(S)	0.612	3	0.204	0.761	0.517
	(M x S)	62.768	234	0.268		
	Error	65.508	241			
	Total					
Seminars	Modules (M)	11.383	2	5.692	16.889	0.000*
	Specialization	0.053	1	0.053	0.156	0.694
	(S)	1.109	2	0.554	1.645	0.196
	(M x S)	67.737	201	0.337		
	Error	80.097	206			
	Total					

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalance model.

*$p < 0.01$

Table 31 (see p. 155)

Comparison of Modules Two to Three Students and Graduates: Importance of Module Two Courses using ANOVA Procedure

Course	Source of Variation	Sum of Squares	df	MS	F	*p*
Educational	Modules (M)	1.316	2	0.658	1.982	0.141
Administration	Specialization	0.478	1	0.478	1.441	0.231
	(S)	0.363	2	0.181	0.546	0.580
	(M x S)	66.725	201	0.332		
	Error	68.589	206			
	Total					
Research	Modules (M)	0.944	2	0.472	1.015	0.364
Methods 2	Specialization	0.016	1	0.016	0.035	0.852
	(S)	0.554	2	0.277	0.595	0.552
	(M x S)	93.493	201	0.465		
	Error	95.430	206			
	Total					
Data Processing 2	Modules (M)	8.031	2	4.015	5.966	0.003*
	Specialization	0.396	1	0.396	0.588	0.444
	(S)	1.222	2	0.611	0.908	0.405
	(M x S)	135.284	201	0.673		
	Error	144.995	206			
	Total					
Small Business 2	Modules (M)	3.346	2	1.673	3.891	0.022*
	Specialization	0.003	1	0.003	0.007	0.934
	(S)	0.615	2	0.307	0.715	0.490
	(M x S)	86.418	201	0.430		
	Error	90.879	206			
	Total					
Seminar	Modules (M)	10.708	1	10.708	16.248	0.000*
	Specialization	0.114	1	0.114	0.173	0.678
	(S)	1.529	1	1.529	2.321	0.130
	(M x S)	108.079	164	0.659		
	Error	121.405	167			
	Total					
Financial	Between	0.099	2	0.050	0.163	0.850
Accounting 1	Groups	31.975	105	0.305		
	Within Groups	32.074	107			
	Total					
Word	Between	0.266	2	0.133	0.502	0.607
Information	Groups	25.371	96	0.264		
Processing 1	Within Groups	25.636	98			
	Total					

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalance model.

$^*p < 0.01$

Table 31 (see p. 155)

Comparison of Modules Two to Three Students and Graduates: Relevance of Module Two Courses using ANOVA Procedure

Course	Source of Variation	Sum of Squares	df	MS	F	*p*
Educational Administration	Modules (M)	2.870	2	1.435	4.171	0.017*
	Specialization	0.065	1	0.065	0.189	0.664
	(S)	0.065	2	0.033	0.094	0.910
	(M x S)	69.162	201	0.344		
	Error	72.097	206			
	Total					
Research Methods 2	Modules (M)	0.484	2	0.242	0.696	0.500
	Specialization	0.039	1	0.039	0.111	0.739
	(S)	0.012	2	0.006	0.017	0.983
	(M x S)	69.868	201	0.348		
	Error	70.386	206			
	Total					
Data Processing 2	Modules (M)	2.102	2	1.051	2.293	0.104
	Specialization	1.599	1	1.599	3.487	0.063
	(S)	2.162	2	1.081	2.358	0.067
	(M x S)	92.143	201	0.458		
	Error	97.749	206			
	Total					
Small Business 2	Modules (M)	4.394	2	2.197	8.317	0.000*
	Specialization	0.010	1	0.010	0.039	0.844
	(S)	2.491	2	1.245	4.714	0.010
	(M x S)	53.101	201	0.264		
	Error	60.995	206			
	Total					
Seminar	Modules (M)	10.630	1	10.630	32.377	0.000*
	Specialization	0.059	1	0.059	0.179	0.673
	(S)	1.072	1	1.072	3.266	0.073
	(M x S)	53.846	164	0.328		
	Error	65.405	167			
	Total					
Financial Accounting 1	Between	3.377	2	1.688	4.149	0.018
	Groups	42.725	105	0.407		
	Within Groups	46.102	107			
	Total					
Word Information Processing 1	Between	1.064	2	0.532	2.098	0.128
	Groups	24.350	96	0.254		
	Within Groups	25.414	98			
	Total					

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalance model.

*$p < 0.01$

Table 32 (see p. 159)

Comparison of Module Three Students and Graduates: Importance of Module Three Courses using ANOVA Procedure

Course	Source of Variation	Sum of Squares	df	MS	F	*p*
Curriculum Development	Modules (M)	0.357	1	0.357	0.909	0.342
	Specialization	0.004	1	0.004	1.011	0.917
	(S)	0.401	1	0.401	1.021	0.314
	(M x S)	64.421	164	0.393		
	Error	65.375	167			
	Total					
Educational Measurement	Modules (M)	0.479	1	0.479	1.242	0.267
	Specialization	0.619	1	0.619	1.605	0.207
	(S)	2.068	1	2.068	5.358	0.022*
	(M x S)	63.279	164	0.386		
	Error	65.976	167			
	Total					
Human Relations	Modules (M)	0.361	1	0.361	1.109	0.294
	Specialization	0.624	1	0.624	1.918	0.168
	(S)	2.059	1	2.059	6.329	0.013*
	(M x S)	53.351	164	0.325		
	Error	55.905	167			
	Total					
Caribbean Economy	Between	0.058	1	0.058	0.132	0.718
	Groups	36.358	82	0.443		
	Within Groups	36.417	83			
	Total					
Financial Accounting 2	Between	0.630	1	0.630	2.390	0.126
	Groups	21.608	82	0.264		
	Within Groups	22.238	83			
	Total					
Word Information Processing 2	Between	0.172	1	0.172	0.652	0.422
	Groups	21.637	82	0.264		
	Within Groups	21.810	83			
	Total					

Note. The Type III sum-of-squares method as a default was used for the analysis due to the unbalance model.

*$p < 0.01$

Table 32 (see p. 159)

Comparison of Module Three Students and Graduates: Relevance of Module Three Courses using ANOVA Procedure

Course	Source of Variation	Sum of Squares	df	MS	F	*p*
Curriculum Development	Modules (M)	0.146	1	0.146	0.362	0.548
	Specialization	2.008	1	2.008	4.991	0.027
	(S)	1.522	1	1.522	3.782	0.054
	(M x S)	66.001	164	0.402		
	Error	68.476	167			
	Total					
Educational Measurement	Modules (M)	0.137	1	0.137	0.313	0.577
	Specialization	1.103	1	1.103	2.525	0.114
	(S)	0.216	1	0.216	0.494	0.483
	(M x S)	71.643	164	0.437		
	Error	72.833	167			
	Total					
Human Relations	Modules (M)	0.056	1	0.056	0.136	0.713
	Specialization	0.504	1	0.504	1.225	0.270
	(S)	1.757	1	1.757	4.269	0.040*
	(M x S)	67.492	164	0.412		
	Error	69.280	167			
	Total					
Caribbean Economy	Between	1.071	1	1.071	4.009	0.049
	Groups	21.917	82	0.267		
	Within Groups	22.988	83			
	Total					
Financial Accounting 2	Between	0.233	1	0.233	0.791	0.376
	Groups	24.183	82	0.295		
	Within Groups	24.417	83			
	Total					
Word Information Processing 2	Between	0.387	1	0.387	1.592	0.211
	Groups	19.934	82	0.243		
	Within Groups	20.321	83			
	Total					

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalance model.

$^*p < 0.01$

Table 33 (see p. 162)

Comparison of Modules One to Three Students and Graduates: Quality of Instruction using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	277.653	3	92.551	4.750	0.003*
Specialization (S)	11.763	1	11.763	0.604	0.438
M x S	4.216	3	1.405	0.072	0.975
Error	4559.384	234	19.485		
Total	4844.298	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
$^{*}p < 0.01$

Table 33 (see p. 162)

Comparison of Modules One to Three Students and Graduates: Appropriateness of Instructors' Teaching Methods using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	14.090	3	4.697	0.712	0.545
Specialization (S)	0.318	1	0.318	0.048	0.826
M x S	15.613	3	5.204	0.789	0.501
Error	1542.483	234	6.592		
Total	1578.000	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
$p < 0.01$

Table 33 (see p. 162)

Comparison of Modules One to Three Students and Graduates: Appropriateness of the Difficulty Level of Instruction using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	2.045	3	0.682	1.135	0.336
Specialization (S)	0.045	1	0.045	0.075	0.785
M x S	1.290	3	0.430	0.716	0.543
Error	140.567	234	0.601		
Total	144.632	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
$p < 0.01$

Table 34 (see p. 164)

Comparison of Modules One to Three Students and Graduates: Adequacy of Consultations Period using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	92.463	3	30.821	60.319	0.000*
Specialization (S)	0.080	1	0.080	0.156	0.693
M x S	0.538	3	0.179	0.351	0.788
Error	119.567	234	0.511		
Total	214.781	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 34 (see p. 164)

Comparison of Modules One to Three Students and Graduates: Availability of Instructors for Consultations using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	1.180	3	0.393	0.643	0.588
Specialization (S)	0.251	1	0.251	0.410	0.523
M x S	0.254	3	0.085	0.139	0.937
Error	143.175	234	0.612		
Total	144.760	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 35 (see p. 168)

Comparison of Module Two and Three Students and Graduates: Discussion of Assessment Procedures using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	20.042	3	6.681	7.518	0.000*
Specialization (S)	0.054	1	0.054	0.061	0.805
M x S	0.096	3	0.032	0.036	0.991
Error	207.942	234	0.889		
Total	228.269	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 36 (see p. 170)

Comparison of Modules One to Three Students and Graduates: Assignments using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	25.675	3	8.558	3.151	0.026*
Specialization (S)	0.069	1	0.069	0.025	0.873
M x S	31.101	3	10.367	3.817	0.011*
Error	635.634	234	2.716		
Total	700.942	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 37 (see p. 172)

Comparison of Module Two and Three Students and Graduates: Examination Schedule using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	4.846	2	2.423	3.005	0.052*
Specialization (S)	1.393	1	1.393	1.727	0.190
M x S	0.245	2	0.122	0.152	0.859
Error	162.071	201	0.806		
Total	169.913	206			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 38 (see p. 173)

Comparison of Module Two and Three Students and Graduates: Content Assessed using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	0.323	2	0.161	0.315	0.730
Specialization (S)	0.075	1	0.008	0.015	0.904
M x S	0.023	2	0.012	0.023	0.978
Error	103.100	201	0.513		
Total	103.478	206			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 39 (see p. 174)

Comparison of Module Two and Three Students and Graduates: Item Wording using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	5.521	2	2.760	6.095	0.003*
Specialization (S)	0.423	1	0.423	0.934	0.335
M x S	0.028	2	0.014	0.031	0.969
Error	91.034	201	0.453		
Total	96.957	206			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$^*p < 0.01$

Table 39 (see p. 174)

Comparison of Module Two and Three Students and Graduates: Item Format using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	4.084	2	2.042	3.394	0.036*
Specialization (S)	0.016	1	0.016	0.026	0.872
M x S	0.060	2	0.030	0.050	0.951
Error	120.938	201	0.602		
Total	125.082	206			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$^*p < 0.01$

Table 40 (see p. 176)

Comparison of Module Two and Three Students and Graduates: Examination Condition using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	4.280	2	2.140	2.185	0.115
Specialization (S)	0.592	1	0.592	0.604	0.438
M x S	0.132	2	0.066	0.067	0.935
Error	196.875	201	0.979		
Total	202.357	206			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 42 (see p. 178)

Comparison of Module Two and Three Students and Graduates: Adequacy of the Grading System using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	24.397	3	8.132	9.804	0.000*
Specialization (S)	0.379	1	0.379	0.457	0.500
M x S	0.261	3	0.087	0.105	0.957
Error	194.101	234	0.829		
Total	220.533	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 43 (see p. 179)

Comparison of Modules One to Three Students and Graduates: Adequacy of Instructors' Feedback using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	4.092	3	1.364	1.527	0.208
Specialization (S)	0.740	1	0.740	0.829	0.364
M x S	2.259	3	0.753	0.843	0.472
Error	209.067	234	0.893		
Total	1195.000	242			

Note. The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 43 (see p. 179)

Comparison of Modules One to Three Students, and Graduates: Quality of Progress Report using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	40.797	2	20.399	11.924	0.000*
Specialization (S)	0.801	1	0.801	0.468	0.495
M x S	3.036	2	1.518	0.887	0.413
Error	343.854	201	1.711		
Total	4811.000	207			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 44 (see p. 182)

Comparison of Modules One to Three Students, and Graduates: Quality of Teaching Materials using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	22.571	3	7.524	10.420	0.000*
Specialization (S)	0.175	1	0.175	0.242	0.623
M x S	3.306	3	1.102	1.526	0.208
Error	168.951	234	0.722		
Total	196.860	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 44 (see p. 182)

Comparison of Modules One to Three Students and Graduates: Adequacy of Teaching Materials using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	9.989	3	3.330	1.169	0.322
Specialization (S)	0.328	1	0.328	0.115	0.734
M x S	6.478	3	2.159	1.758	0.519
Error	666.318	234	2.848		
Total	684.645	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 44 (see p. 182)

Comparison of Modules One to Three Students and Graduates: Quality of Personnel using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	307.507	3	102.502	5.356	0.001*
Specialization (S)	11.202	1	11.202	0.585	0.445
M x S	57.627	3	19.209	1.004	0.392
Error	4478.388	234	19.138		
Total	4908.843	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 45 (see p. 185)
Comparison of Modules One to Three Students and Graduates: Availability of Books and Periodicals using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	41.538	3	13.846	21.916	0.000*
Specialization (S)	0.647	1	0.647	1.023	0.313
M x S	1.571	3	0.524	0.829	0.479
Error	147.833	234	0.632		
Total	194.281	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
$^{*}p < 0.01$

Table 45 (see p. 185)
Comparison of Modules One to Three Students, and Graduates: Adequacy of Books and Periodicals using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	71.943	3	23.981	38.514	0.000*
Specialization (S)	0.272	1	0.272	0.438	0.509
M x S	0.163	3	0.054	0.087	0.967
Error	145.700	234	0.623		
Total	218.643	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
$^{*}p < 0.01$

Table 46 (see p. 187)
Comparison of Modules One to Three Students, and Graduates: Adequacy of Library Reading and Study Space using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	11.835	3	3.945	7.684	0.000*
Specialization (S)	2.502	1	2.502	4.873	0.028*
M x S	1.931	3	0.644	1.254	0.291
Error	120.143	234	0.513		
Total	135.178	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
$^{*}p < 0.01$

Table 46 (see p. 187)
Comparison of Modules One to Three Students and Graduates: Library Lending Policies using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	3.468	3	1.156	2.125	0.098
Specialization (S)	0.004	1	0.004	0.080	0.778
M x S	1.414	3	0.471	0.867	0.459
Error	127.296	234	0.544		
Total	132.798	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
$p < 0.01$

Table 46 (see p. 187)
Comparison of Modules One to Three Students and Graduates: Adequacy of Library Operating Hours using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	40.671	3	13.557	16.850	0.000*
Specialization (S)	0.647	1	0.647	0.804	0.371
M x S	3.922	3	1.307	1.625	0.184
Error	188.267	234	0.805		
Total	233.752	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
*$p < 0.01$

Table 47 (see p. 190)
Comparison of Modules One to Three Students and Graduates: Classroom Comfort using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	94.446	3	31.482	49.652	0.000*
Specialization (S)	0.144	1	0.144	0.227	0.634
M x S	1.932	3	0.644	1.016	0.386
Error	148.368	234	0.634		
Total	246.000	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.
*$p < 0.01$

Table 47 (see p. 190)

Comparison of Modules One to Three Students and Graduates: Cleanliness of Learning Environment using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	37.507	3	12.502	17.546	0.000*
Specialization (S)	0.880	1	0.880	1.235	0.268
M x S	0.255	3	0.008	0.119	0.949
Error	166.733	234	0.713		
Total	207.145	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$^*p < 0.01$

Table 48 (see p. 192)

Comparison of Modules One to Three Students and Graduates: Adequacy of B. Ed. Office Space using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	4.816	3	1.605	2.309	0.077
Specialization (S)	1.408	1	1.408	2.026	0.156
M x S	0.785	3	0.262	0.376	0.770
Error	162.676	234	0.695		
Total	169.207	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 48 (see p. 192)

Comparison of Modules One to Three Students and Graduates: Adequacy of Reading Space using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	1.990	3	0.663	0.288	0.834
Specialization (S)	0.449	1	0.449	0.195	0.659
M x S	5.909	3	1.970	0.857	0.464
Error	537.983	234	2.299		
Total	546.281	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 49 (see p.194)

Comparison of Modules One to Three Students and Graduates: Adequacy of Computers using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	13.940	3	4.647	10.315	0.000*
Specialization (S)	0.771	1	0.771	1.712	0.192
M x S	1.098	3	0.366	0.813	0.488
Error	105.413	234	0.450		
Total	120.942	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 49 (see p. 194)

Comparison of Modules One to Three Students and Graduate: Availability of Computers using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	4.752	3	1.584	1.909	0.129
Specialization (S)	1.485	1	1.485	1.789	0.182
M x S	3.165	3	1.055	1.271	0.285
Error	194.168	234	0.830		
Total	204.483	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 49 (see p. 194)

Comparison of Modules One to Three Students and Graduates: Adequacy of Computer Labs Operating Hours using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	19.563	3	6.521	7.669	0.000*
Specialization (S)	0.951	1	0.951	1.118	0.291
M x S	2.395	3	0.798	0.939	0.422
Error	198.968	234	0.850		
Total	221.802	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 50 (see p. 197)

Comparison of Modules One to Three Students and Graduates: Adequacy of Student Services using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	13.016	3	4.339	7.510	0.000*
Specialization (S)	2.552	1	2.552	4.418	0.037
M x S	2.439	3	0.813	1.407	0.241
Error	135.188	234	0.578		
Total	153.508	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$^*p < 0.01$

Table 50 (see p. 197)

Comparison of Modules One to Three Students and Graduates: Adequacy of Student Hostel Accommodation using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	12.929	3	4.310	6.037	0.001*
Specialization (S)	1.820	1	1.820	2.549	0.112
M x S	8.539	3	2.846	3.987	0.009
Error	167.051	234	0.714		
Total	187.983	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$^*p < 0.01$

Product Evaluation Tables

Table 55 (see p. 214)

Comparison of Modules One to Three Students and Graduates: Student Class Attendance using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	5.153	3	1.718	6.434	0.000*
Specialization (S)	1.093	1	1.093	4.095	0.044*
M x S	1.188	3	0.396	1.483	0.220
Error	62.476	234	0.267		
Total	70.781	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 55 (see p. 214)

Comparison of Modules One to Three Students and Graduates: Student Use of Time using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	6.914	3	2.305	4.267	0.006*
Specialization (S)	3.824	1	3.824	7.080	0.006*
M x S	4.364	3	1.455	2.693	0.047*
Error	126.393	234	0.540		
Total	143.207	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 56 (see p. 215)

Comparison of Modules One to Three Students and Graduates: Students Relationship in the B. Ed. Business Education Programs using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	P
Modules (M)	6.293	3	2.098	5.204	0.002*
Specialization (S)	0.239	1	0.239	0.592	0.442
(M x S)	0.831	3	0.277	0.687	0.561
Error	94.326	234	0.403		
Total	102.116	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 56 (see p. 215)

Comparison of Modules One to Three Students and Graduates: Students Behavior using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	12.373	3	4.124	7.440	0.000*
Specialization (S)	0.549	1	0.549	0.990	0.321
(M x S)	0.450	3	0.150	0.271	0.846
Error	129.708	234	0.554		
Total	143.769	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 57 (see p. 216)

Comparison of Modules One to Three Students and Graduates: Student Attitude using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Modules (M)	7.996	3	2.665	1.429	0.235
Specialization (S)	5.451	1	5.451	2.921	0.089
M x S	26.599	3	8.866	4.752	0.003*
Error	436.592	234	1.866		
Total	474.033	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 58 (see p. 219)

Comparison of Business and Secretarial Studies Graduates on Job Performance using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*p*
Between Groups	5.759	1	5.759	0.071	0.790
Within Groups	9838.588	122	80.644		
Total	9844.347	123			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

$p < 0.01$

Table 64 (see p. 233)

Comparison of Modules One to Three Students and Graduates: Modular System and the B. Ed. Business Education Programs using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	6.022	3	2.007	4.560	0.004*
Specialization (S)	0.060	1	0.060	0.015	0.903
(M x S)	0.123	3	0.041	0.093	0.964
Error	103.004	234	0.440		
Total	1163.000	231			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Table 69 (see p. 243)

Comparison of the Students and Graduates: Confidence in Modular System using ANOVA Procedure

Source of Variation	Sum of Squares	df	MS	F	*P*
Modules (M)	1.749	3	0.583	1.057	0.368
Specialization (S)	0.009	1	0.009	0.159	0.691
(M x S)	5.047	3	1.682	3.050	0.029*
Error	128.509	233	0.552		
Total	135.245	241			

Note: The Type III sum-of-squares method as a default was used for the analysis due to the unbalanced model.

*$p < 0.01$

Appendix K:

B. Ed. Interview Guide

B. Ed. Acceptance Letter

B. Ed. Interview Guide

University of Technology, Jamaica
Faculty of Education and Liberal Studies
Bachelor of Education Degree Program

Name……………………………………………………………………………………

GUIDELINES for interviewing applicants for the Bachelor of Education Degree Program

A. 1. Qualification of Applicant

……………………………………………………………………………………

……………………………………………………………………………………

2. Experience (Teaching/Other)

……………………………………………………………………………………

……………………………………………………………………………………

3. Responsibilities (on-the-job)

……………………………………………………………………………………

……………………………………………………………………………………

B. Rate items 4-9 on a 1-5 scale, with 1 being the lowest rating and 5 being the highest rating.

4.	Maturity (problem-solving ability) Use simple school-related case	1	2	3	4	5
5.	Career Goals	1	2	3	4	5
6.	Communication Skills	1	2	3	4	5
7.	Extra Curricular Activities	1	2	3	4	5
8.	Philosophy of Technical/ Vocational	1	2	3	4	5
9.	Drive to complete course	1	2	3	4	5

UNIVERSITY OF TECHNOLOGY, JAMAICA
(Formerly The College of Arts, Science & Technology)

237 Old Hope Road, Kingston 6
JAMAICA, West Indies
Tel: (876) - 927-1680 thru' 8
Fax: (876) - 977-4388
(876) - 927-1925
Website: http: \\ns.utech.edu.jm/
Email: registrar@utech.edu.jm
Cable: UTECH, KINGSTON

President: Rae A. Davis Ph.D., F.J.I.E.

May 12, 1998

Dear Applicant,

Re: Acceptance to B. Ed. Degree Program - 1998

The section of the application form giving consent for your release for classes was not signed by your Principal as required. You have therefore been accepted only provisionally.

Please ask your Principal to complete the tear-off slip below and return it to the Degree Office as soon as possible. Further processing of your application will await its return.

Yours faithfully,

Daphne Comrie (Ms.)
B. Ed. Coordinator
Faculty of Education and Liberal Studies

DC/ch

- -

The ______________________________ School agrees to release Miss/Mrs./Mr. ______________________________ for classes/seminars on the last Friday in October and November, 1998 and February, March, and October 1999 by granting the necessary leave of absence.

Name of Principal	Signature	Date

Appendix L:

B. Ed. Seminar Evaluation Scale

B. Ed. Course Evaluation Scale

UNIVERSITY OF TECHNOLOGY, JAMAICA

BACHELOR OF EDUCATION DEGREE PROGRAM

SEMINAR EVALUATION SHEET

Please rate the Seminar on the following criteria from one (1 = Least Satisfactory) to five (5 = Most Satisfactory).

		1	2	3	4	5
1.	The extent to which seminar objectives were made clear.					
2.	Contributed to your personal/professional development.					
3.	The extent to which practical questions and issues relevant to your specialist orientation were addressed.					
4.	The extent to which the seminar served as an extension of the course to which it is linked.					
5.	Opportunities for meaningful group interaction.					
6.	The extent to which presentation motivated discussion and aided learning.					
7.	Quality of feedback provided by presenter.					
8.	The extent to which objectives of seminar were achieved.					

GENERAL COMMENTS/RECOMMENDATIONS

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UNIVERSITY OF TECHNOLOGY, JAMAICA

BACHELOR OF EDUCATION DEGREE PROGRAM

COURSE EVALUATION

This Evaluation is designed to obtain feedback on the course you have just completed.

OPTION: ______________ COURSE: ________________

Respond by ticking in the relevant column the degree to which the course satisfied the following criteria.

Rating Scale (1 = Lowest and 5 = Highest)

Key: 1 = Below
2 = Minimally acceptable
3 = Adequate
4 = Very Satisfactory
5 = Excellent

1.	The objectives of the course were clearly stated.	1	2	3	4	5
2.	The objectives were significant in relation to career needs.	1	2	3	4	5
3.	The course work requirements were clearly outlined.	1	2	3	4	5
4.	The course materials will help me to solve current problems in the specialist area.	1	2	3	4	5
5.	The materials were adequate in view of the time allowed for learning.	1	2	3	4	5
6.	The learning activities provided opportunities for meaningful student/tutor interaction.	1	2	3	4	5
7.	The instructional methods were appropriate to the teaching.	1	2	3	4	5
8.	Opportunities for experiential learning were provided.	1	2	3	4	5

9. There is a definite increase in my appreciation of the areas studies. 1 2 3 4 5

10. The lecturer demonstrated competence in course delivery. 1 2 3 4 5

11. Tutorial sessions were useful in clarifying issues. 1 2 3 4 5

12. The lecturer provided meaningful feedback/evaluation throughout the course. 1 2 3 4 5

13. The lecturer displayed personal interest in assisting students to acquire mastery of required skills. 1 2 3 4 5

14. The course was beneficial in terms of professional growth and development. 1 2 3 4 5

How could this course be improved in content, and/or delivery? Provide specifics of course content, and delivery.

____

____

____

Please indicate below, any other comment(s) which might help in the review of the program.

____

____

____

**If necessary, use extra paper for additional information.